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Drinking Water Surveillance Program

SAULT STE MARIE WATER TREATMENT PLANT AND WELL SUPPLY

Annual Report 1988

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SAULT STE MARIE
WATER TREATMENT PLANT AND WELL SUPPLY

DRINKING WATER SURVEILLANCE PROGRAM

ANNUAL REPORT 1988

FEBRUARY 1990

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EXECUTIVE SUMMARY

DRINKING WATER SURVEILLANCE PROGRAM

SAULT STE MARIE WATER TREATMENT PLANT AND WELL SUPPLY ANNUAL REPORT 1988

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. Currently, 52 plants are being monitored.

The Sault Ste Marie supply consists of surface water from Lake Superior supplied from the water treatment plant and groundwater delivered from four well pumping stations. The Water Treatment Plant is a direct filtration plant. The treatment process consists of coagulation, flocculation, filtration and disinfection. The plant has a design capacity of 40 x 1000m3/day. The water at all four well pumping stations is disinfected. The plant and the four well pumping stations serve a population of 85,000.

Raw and treated water was sampled at the plant and at two of the four well pumping stations. Two locations in the distribution system were also sampled. Samples were taken on a monthly basis and analyzed for approximately 160 parameters during 1988. Parameters were divided into the following groups Bacteriological, Inorganic and Physical(Laboratory Chemistry, Field Chemistry and Metals) and Organics (Chloroaromatics, Chlorophenols, Pesticide and PCB, Phenolics, Polynuclear Aromatic Hydrocarbons, Specific Pesticides and Volatiles). Specific Pesticides and Chlorophenols were analysed for in June and November only.

A summary of results is shown in Table 1.

The ODWO for turbidity was exceeded three times in the treated water from the plant. The District Officer was notified. All other Inorganic and Physical parameters (Laboratory Chemistry, Field Chemistry and Metals) were below any applicable health related ODWOs.

Of approximately 110 Organic parameters tested for on a monthly basis, none exceeded health related guidelines.

During 1988 the DWSP sampling results indicated that the Sault Ste Marie Water Supply was of good quality water and this was maintained in the distribution system.

TABLE 1

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP

SUMMARY TABLE BY SCAN (1988)

	WATER TREATMENT PLANT						DISTRIBUTION SYSTEM							STEELTON WELL						LORNA WELL					
	RAW			TREATED			SITE 1			SITE 2				RAW			TREATED			RAW			TREATED		
SCAN	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS	TESTS	POSITIVE	%POS
BACTERIOLOGICAL	43	24	55	44	5	11	44	8	18	36	6	16	43	4	9	44	11	25	44	5	11	44	9	20
CHEMISTRY (FLD)	35	35	100	61	61	100	76	76	100	71	71	100	24	24	100	49	49	100	24	24	100	50	50	100
CHEMISTRY (LAB)	237	151	63	224	154	68	415	342	82	330	251	76	237	150	63	237	165	69	245	176	71	229	166	72
METALS	288	95	32	288	81	28	564	298	52	447	228	51	288	117	40	288	126	43	288	149	51	288	142	49
CHLOROAROMATICS	154	0	0	168	0	0	168	0	0	140	0	0	168	0	0	140	0	0	168	0	0	168	0	0
CHLOROPHENOLS	12	0	0	12	0	0	.	.	.	.	.	.	12	0	0	12	0	0	12	0	0	12	0	0
PAH	204	0	0	204	0	0	.	.	.	.	.	.	187	0	0	187	0	0	204	0	0	204	0	0
PESTICIDES & PCB	375	0	0	396	0	0	385	0	0	330	0	0	383	0	0	341	0	0	385	0	0	396	0	0
PHENOLICS	12	1	8	12	1	8	.	.	.	.	.	.	10	1	10	11	0	0	12	1	8	12	2	16
SPECIFIC PESTICIDES	55	0	0	55	0	0	0	0	0	0	0	0	55	0	0	55	0	0	55	0	0	55	0	0
VOLATILES	316	1		316	37	11	316	29	9	259	29	11	316	1		316	14	4	287	3	1	316	7	2
TOTAL	1731	307		1780	339		1968	753		1613	585		1723	297		1680	365		1724	358		1774	376	

THE ODWO FOR TURBIDITY (1 FTU) WAS EXCEEDED IN THREE TREATED WATERS FROM THE PLANT

A POSITIVE VALUE DENOTES THAT THE RESULT IS GREATER THAN THE STATISTICAL LIMIT OF DETECTION AND IS QUANTIFIABLE
A '.' INDICATES THAT NO SAMPLE WAS TAKEN

DRINKING WATER SURVEILLANCE PROGRAM

SAULT STE MARIE WATER TREATMENT PLANT AND WELL SUPPLY 1988 ANNUAL REPORT

INTRODUCTION

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. Currently, 52 plants are being monitored.

The DWSP was initiated at the Sault Ste Marie Water Treatment Plant and Well Supply in April 1987. An Annual Report was published for 1987 (ISSN 0840-5158).

This report contains information and results for 1988.

PLANT DESCRIPTION

The Sault Ste Marie supply consists of surface water from Lake Superior supplied from the Water Treatment Plant and groundwater delivered by four well pumping stations.

The Water Treatment Plant is a direct filtration treatment plant. The treatment process consists of coagulation, flocculation,

filtration and disinfection. Ammonia is added at the post-chlorination step to produce a long-lasting chloramine residual in the distribution system. The plant has a design capacity of 40 x 1000 m^3/day and daily flows ranging from 17 x 1000 m^3/day to 55.5 x 1000 m^3/day.

The DWSP is sampling at two of the four well pumping stations. The Lorna Well has a pumping rate of 13.65 x 1000 m^3/day and daily flows ranging from .3 x 1000 m^3/day to 6.8 x 1000 m^3/day. The Steelton Well has a pumping rate of 8.2 x 1000 m^3/day and daily flows of 8.4 x 1000 m^3/day to 9.0 x 1000 m^3/day. The water at all four well pumping stations is chlorinated and ammonia is added.

The groundwater delivered from the four well pumping stations can contribute approximately 50% of the total water demand which mixes with the water from the treatment plant in the Zone 1 distribution system. This makes it difficult to obtain a distribution sample that is from a known single source.

The Sault Ste Marie Water Treatment Plant and Well Supply serves a population of 85,000.

The plant location is shown in Figure 1. The plant process details, in a block schematic, are shown in Figures 2 and 3. General plant information is presented in Table 2.

METHODS

Water samples were obtained from eight DWSP approved locations;

i) Plant Raw - The water originated from the lowlift well prior to chlorination and was sampled through a copper line. The sample tap is located adjacent to the main.

ii) Plant Treated - The water originated from the highlift discharge after addition of all treatment chemicals and was sampled through a copper line. The sample tap is located in the plant basement.

iii) Distribution System - Site 1 - This house is located in Zone 1, where all water supply production occurs. Water was sampled through copper plumbing from the basement laundry tap.

iv) Distribution System - Site 2 - This house is located in Zone 2. Water was sampled through copper plumbing from the kitchen tap.

v) Lorna Well - Raw Tap - The water originated at the lowlift pump discharge prior to chlorination/ammoniation and was sampled through a copper line.

vi) Lorna Well - Treated Tap - The water originated at the end of the retention main after chlorination/ ammoniation and was sampled through a copper line.

vii) Steelton Well - Raw Tap - The water originated at the lowlift pump prior to chlorination/ammoniation and was sampled through a copper line.

viii) Steelton Well - Treated Tap - The water originated at the highlift pump after chlorination/ammoniation and was sampled through a copper line.

Sample lines in the plant and well pumping stations were flushed prior to sampling to ensure that the water obtained was indicative of its origin and not residual water standing in the sample line.

At both distribution system locations two types of samples were obtained: a standing and a free flow. The standing sample consisted of water that had been in the household plumbing and service connection for a minimum of six hours. These samples are used to make an assessment of the amount by which the levels of inorganic compounds and metals may be changed on standing due to leaching from (or deposition on) the plumbing system. The only analyses carried out on the standing samples therefore, are General Chemistry and Metals. The free flow sample represented fresh water from the distribution main that had been flowing from the sample tap for five minutes before being sampled.

Stringent DWSP sampling protocols were followed to ensure that all samples were taken in a uniform manner.

FIGURE 1

DRINKING WATER SURVEILLANCE PROGRAM

SITE LOCATION MAP

SAULT STE MARIE WATER SUPPLY

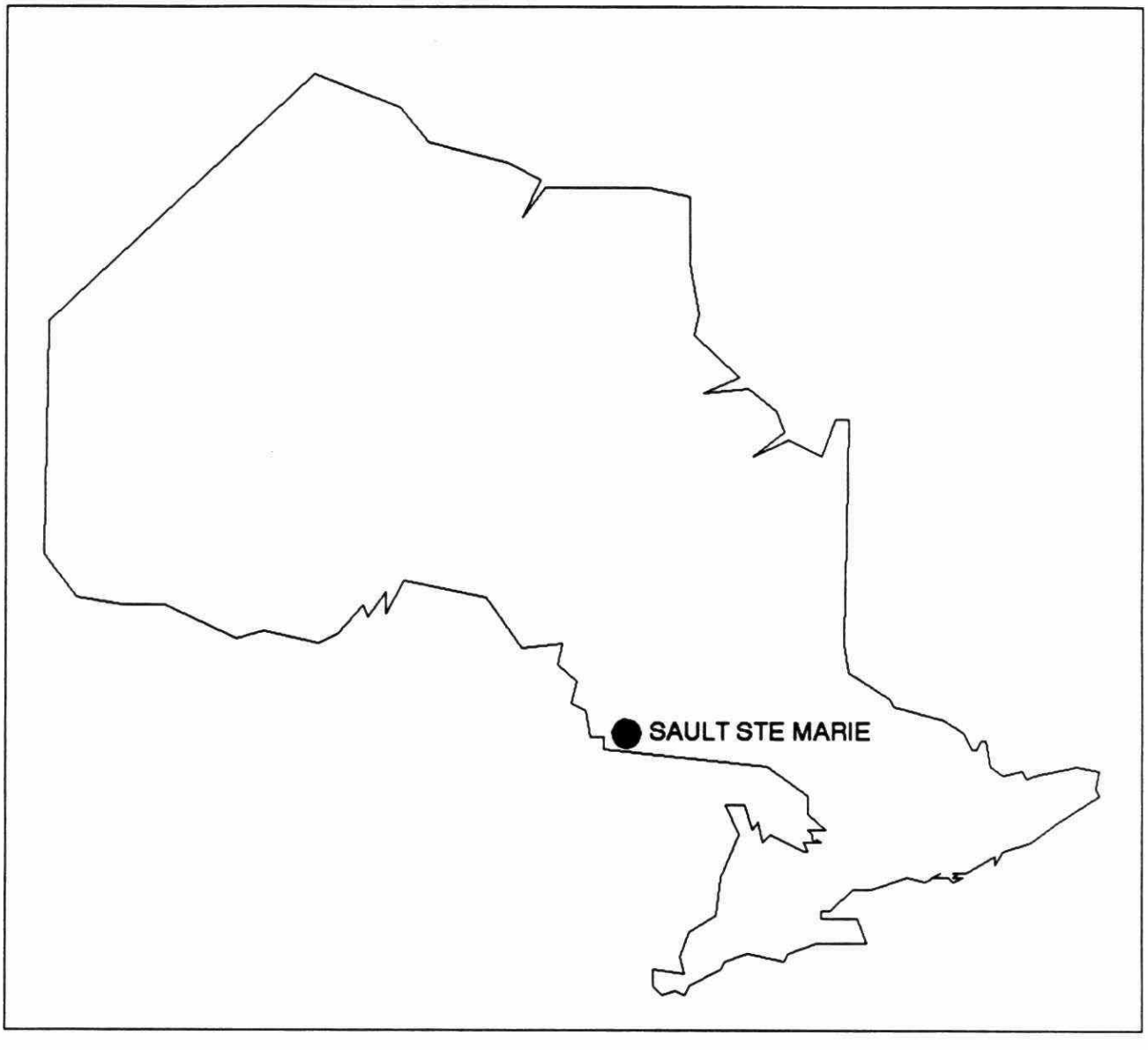

FIGURE 2

SAULT STE MARIE WATER TREATMENT PLANT

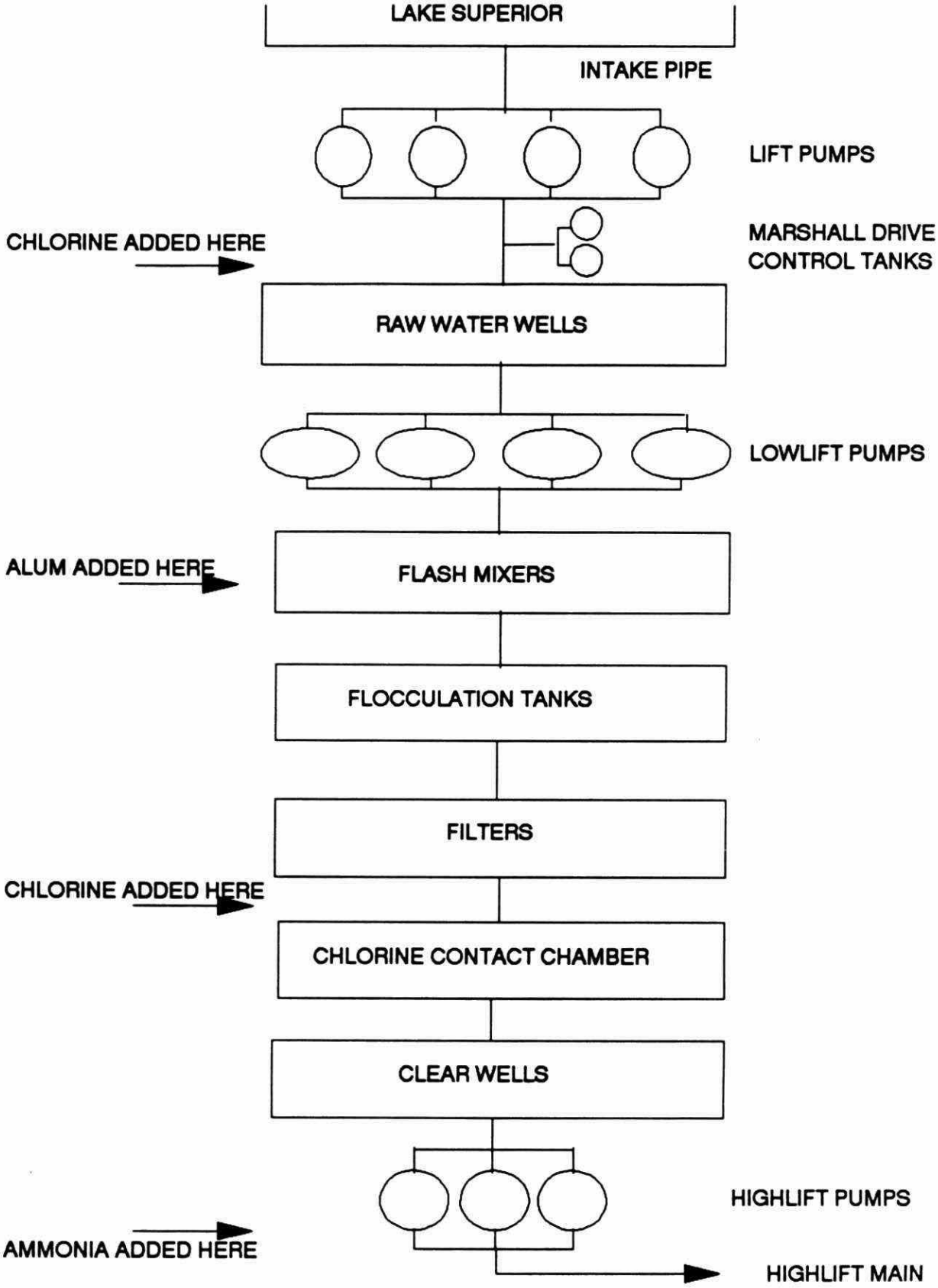

TABLE 2

DRINKING WATER SURVEILLANCE PROGRAM ANNUAL REPORT

GENERAL INFORMATION

SAULT STE MARIE WATER TREATMENT PLANT AND WELL SUPPLY

LOCATION:	P.O. BOX 9000 SAULT STE MARIE, ONTARIO P6A 6P2 (705-759-6500)
SOURCE:	RAW WATER SOURCE - LAKE SUPERIOR GROUNDWATER
DESIGN CAPACITY:	40 (1000 M^3/DAY) AT THE PLANT 37 (1000 M^3/DAY) ALL WELLS
OPERATION:	MUNICIPALITY
PLANT SUPERINTENDENT:	T. GODFREY
MINISTRY REGION:	NORTHEASTERN
DISTRICT OFFICER:	MR. G. LaHAYE

MUNICIPALITY SERVED	POPULATION
SAULT STE MARIE	85,000

Sample day flow, treatment chemical dosages and Field Chemistry measurements were recorded on the day of sampling and were entered on the DWSP database as submitted.

RESULTS

Raw and treated water was sampled from the Sault Ste Marie Water Treatment Plant and from two well pumping stations. Two locations in the distribution system were also sampled. Samples were taken on a monthly basis and analyzed for approximately 160 parameters on a monthly basis in 1988. The Specific Pesticides and Chlorophenols scans were sampled for in June and November only. Polynuclear Aromatic Hydrocarbons and Phenolics were only analysed for in the raw and treated water at the plant and at both wells. Due to lab loading the volatiles were not analysed in February.

Table 3 contains information on the sample day retention time, flow rate and treatment chemicals used and their associated dosages.

Table 4 is a summary break-down of the number of water samples analysed for by parameter and by water type. The number of times that a positive or trace result was detected is also reported.

Positive denotes that the result is greater than the statistical limit of detection established by the Ministry of the Environment

(MOE) laboratory staff and is quantifiable. Trace (<T) denotes that the level measured is greater than the lowest value detectable by the method but lies so close to the detection limit that it cannot be confidently quantified.

Table 5 presents the results for parameters detected on at least one occasion.

Table 6 lists all parameters analysed in the DWSP.

Associated guidelines and detection limits are also supplied on both tables. Parameters are listed alphabetically within each scan.

DISCUSSION

General

Water quality is judged by comparison with the Ontario Drinking Water Objectives (ODWOs) as defined in the 1984 publication (ISBN 0-7743-8985-0). The Province of Ontario has health related and aesthetic objectives for 49 parameters, these are currently under review. When an ODWO is not available guidelines/limits from other agencies are consulted. The Parameters Listing System (PALIS) recently published (ISBN 0-7729-4461-X) by the MOE catalogues and keeps current over 1750 guidelines for 650 parameters from agencies throughout the world.

Although some of the parameters measured on DWSP may be present in the raw and treated water as a result of pollution, many of the compounds detected are naturally occuring or are treatment by-products.

Plant operational personnel address occurrences of taste and odour or biological water quality parameters. The DWSP does not assess these aspects of the water supply.

As stated under Results, traces do not indicate quantifiable values, as defined by established MOE Laboratory analytical reporting protocols. While they can be useful in trend analysis or confirmation of a specific contaminant that is repeatedly detected at these levels, the occasional finding of a trace level of a contaminant is not considered to be significant. **DISCUSSION OF GUIDELINES AND LIMITS THEREFORE, IS ONLY CONDUCTED ON POSITIVE RESULTS.**

Bacteriology

Positive results for the Bacteriology scan were present five times in the treated water from the plant, nine times in the treated water from the Lorna Well, eleven times in the treated water from the Steelton Well, eight times in the Site 1 water and six times in the Site 2 water. The positive parameters were Standard Plate

Count, Total Coliform and Total Coliform Background. Coliforms were detected at 3/100mL in the July treated water at Steelton well.

Standard Plate Count is a test used to supplement routine analysis for Coliform bacteria. The limit for Standard Plate Count (at 35°C after 48 hours) from the ODWOs is 500 organisms per mL (based on a geometric mean of 5 or more samples). The elevated Standard Plate Count in the August Site 1 water and treated water from Lorna Well may be indicative of deteriorated conditions. The temperature of treated and distributed water was highest in the August samples, which would tend to encourage bacterial growth.

Guidelines for bacteriological sampling and testing of a supply are developed to maintain a proper supervision of its bacteriological quality; the routine monitoring program usually requires the taking of multiple samples in a given system. Full interpretation of bacteriological quality cannot be made on the basis of single samples. Further, bacteriological limits were developed in acknowledgement that the presence of coliforms may be detected due to their non-uniform distribution throughout the distribution system and the fact that their enumeration is subject to considerable variation. For these reasons, the occasional finding of low numbers of coliform organisms is not unexpected. Routine bacteriological monitoring, as outlined in the ODWOs is carried out by the operating authority.

Inorganic and Physical Parameters

Laboratory and Field Chemistry

The ODWO for Turbidity, 1.0 Formazin Turbidity Unit (FTU) was exceeded three times in the treated water from the water treatment plant as reported from the laboratory analysis, 2.9 FTU in January, 1.5 FTU in May and 1.06 FTU in August. The turbidity values measured at the water treatment plant do not exceed 0.3 FTU. The discrepany between field measured and lab measured turbidity values is being investigated. The District Officer was notified.

No other health related guidelines were exceeded.

It is desirable that the Temperature of drinking water be less than 15°C; the palatability of water is enhanced by its coolness. A temperature below 15°C will tend to reduce the growth of nuisance organisms and hence minimize associated taste, colour, odour and corrosion problems. The temperature of the delivered water may increase in the distribution system due to the warming effect of the soil in late summer and fall and/or as a result of higher temperatures in the source water. The desired ODWO was exceeded six times in the treated water and free flow distributed water.

The Langelier Index is used extensively in estimating the corrosion potential of water. An increasingly negative index indicates the

increasing possibility of corrosion. It is considered sound engineering practice to maintain a slightly positive Langelier Index. The Langelier Index for the Sault Ste Marie water is erratic.

Metals

The results reported for the Metal scan were below any applicable health related ODWOs.

Elevated levels of Copper, Lead, Nickel and Zinc were detected in most of the standing water samples from the distribution system waters as compared to the free flow samples thus, indicating that these metals were leached from the household plumbing as the water stood overnight. The Langelier Index indicates potential for corrosion and some metals will be leached in standing samples in most supplies.

The Strontium and Uranium levels from the two distribution system Sites do in fact indicate that the water from the well pumping stations is mixing with the water from the treatment plant prior to sampling at these locations.

At present, there is no evidence that Aluminum is physiologically harmful and no health limit for drinking water has been specified. The measure of residual Aluminum in the treated water is important to indicate the efficiency of the treatment process. The ODWOs

indicate that a useful guideline is to maintain a residual below 100 ug/L as Al in the water leaving the plant to avoid problems in the distribution system. Aluminum values exceeded the ODWO operational guideline fifteen times in the treated water and distributed water.

The aluminum values for January and May were also very high indicating that the plant was overdosing with alum. This was as a result of equipment failure.

Organic Parameters

Chloroaromatics

Results of the Chloroaromatics scan showed that no chloroaromatics were detected.

Chlorophenols

Results of the Chlorophenol scan showed that no Chlorophenols were detected.

Pesticides and PCB (Polychlorinated Biphenyl)

Results of the Pesticides and PCB scan showed that no PCBs were detected and that two pesticides were detected:

Alpha BHC

Lindane

There are several isomers of BHC (Benzene Hexachloride); gamma BHC is the active ingredient of the pesticide Lindane, while alpha BHC is the isomer predominantly found in surface waters of the Great Lakes basin as indicated in results from other water supplies on DWSP.

Alpha BHC was detected at trace levels, eleven times in the raw water and ten times in the treated water from the plant, ten times in the distribution system Site 1 water, nine times in the Site 2 water and once in the treated water from Lorna well.

Lindane was detected at trace levels, once in the raw water and three times in the treated water from the plant, once in the distribution system Site 1 water and once in the Site 2 water, and once in the treated water from Steelton well.

Specific Pesticides

Results of the Specific Pesticide scan showed that no Specific Pesticides were detected.

Phenolics

The maximum desirable concentration of phenolic substances in drinking water is 2.0 ug/L. This limit has been set primarily to prevent the occurrence of undesirable tastes and odours, particularly in chlorinated water. Phenolics were detected in August at 1.4 ug/L in the raw water and 1.2 ug/L in the treated

water from the plant, 1.8 ug/L in the raw water and 1.2 ug/L in the treated water from Lorna well and in December at .80 ug/L in the treated water from Lorna well. Phenolics were detected at trace levels, six times in the raw water and five times in the treated water from the plant, three times in the raw water and treated water fron Steelton well and three times in the raw water and treated water from Lorna well. Phenolic compounds are present in the aquatic environment as a result of natural and/or industrial processes.

Polynuclear Aromatic Hydrocarbons (PAH)

Results of the PAH scan showed that no PAHs were detected.

Volatiles

Results of the Volatile scan showed that nine parameters, other than Trihalomethanes(THMs), were detected:

Toluene

Ethylbenzene

Para & Meta-Xylene

Ortho-Xylene

Styrene

Methylene Chloride (Dichloromethane)

1,1,1-Trichloroethane

Tetrachloroethylene

Ethylene Dibromide

Toluene was detected at trace levels, five times in the treated water from the plant, three times in the Site 2 water, twice in the raw water and treated water from Steelton well and twice in the raw water and once in the treated water from Lorna well. The detection of toluene at low, trace levels is a laboratory artifact derived from the analytical methodology. The purge-and-trap analytical technique depends on the purging of the volatile organics in the water sample with helium gas onto a Tenax trapping column. The volatile materials are subsequently thermally desorbed, separated and quantified. Tenax, a toluene-like polymeric material, tends to decompose sporadically upon heating into toluene and other aromatic componenets (ethylbenzene and xylene) giving instrument blanks in the order of 0.05 ug/L.

The detected trace levels of Styrene are also considered to be laboratory artifacts due to the outgassing of monomeric styrene from the polystyrene shipping containers. The sporadic background levels from this source are in the order of 0.05 ug/L.

Ethylbenzene was detected at trace levels, three times in the raw water and eight times in the treated water from the plant, once in the Site 1 water and three times in the Site 2 water, six times in the raw water and ten times in the treated water from Steelton Well, six times in the raw water and eight times in the treated water from Lorna Well.

Para and Meta-Xylene are reported as one compound, M-Xylene and were detected at trace levels, twice in the treated water from the plant, once in the Site 2 water, once in the raw and treated water from Steelton Well and twice in the treated water from Lorna Well.

Ortho-Xylene (O-Xylene) was detected at a trace level, once in the treated water from Lorna well.

These volatiles are typically found on an occasional basis at other water supplies included on the DWSP usually at trace levels.

Methylene chloride was detected at 2.0 ug/L in the March raw water sample from Lorna well. Laboratory staff considered this value unreliable as per the comment 'UCS'.

1,1,1-Trichloroethane was detected at trace levels, once in the raw water from the plant and twice in the treated water from Steelton well.

Tetrachloroethylene was detected at trace levels, once in the treated water from the plant, twice in the Site 1 water and once in the Site 2 water and four times in the raw and treated water from Steelton well.

Ethylene dibromide was detected at a trace level, once in the treated water from Lorna well.

THMs are known to be produced during the water treatment process and will always occur in chlorinated surface waters. THMs are comprised of Chloroform, Chlorodibromomethane and Dichlorobromomethane. Bromoform occurs occasionally. Results are reported for the individual compounds as well as for total THMs.

At the treatment plant, all treated waters showed the presence of Chloroform, Dichlorobromomethane and Chlorodibromomethane; some raw waters showed the presence of trace amounts of chloroform, dichlorobromomethane and chlorodibromomethane. Chloroform was detected at trace levels in most treated waters from both of the well supplies and in some raw waters. Dichlorobromomethane was detected at trace levels in a few raw waters and most treated waters at Steelton Well and a few treated waters at Lorna Well. Chlorodibromomethane was detected at trace levels in some treated well samples. Bromoform was found at trace levels only in two samples of treated water from Steelton Well. All total THM occurrences, ranging from 3.65 ug/L to 23.75 ug/L, were well below the ODWO of 350 ug/L.

CONCLUSIONS

A comparison of the general chemistry and metals results (most noticeably Strontium and Uranium) indicate that the distribution samples are taken after the water from the treatment plant and the

groundwater from the wells has been mixed.

Certain results (strontium, uranium, alpha BHC) also indicate that the March and April samples from Lorna Well have been mixed-up with the treated water samples from the plant.

The Sault Ste Marie Water Treatment Plant for the sample year of 1988 produced good quality water at the plant and from the well systems and this was maintained in the distribution system.

No known health related guidelines, for organic parameters were exceeded during 1988.

RECOMMENDATIONS

One recommendation can be made:

1) Several raw water samples from the well supplies showed the presence of chlorine, these sites should be reassessed to ensure that they still meet DWSP specifications.

TABLE 3

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP SAMPLE DAY CONDITIONS FOR 1988

	SAMPLE DAY CONDITIONS		TREATMENT CHEMICAL DOSAGES (MG/L)			
			PRE-CHLORINATION	COAGULATION	POST-CHLORINATION	CHLORAMINATION
			CHLORINE	ALUM LIQUID	CHLORINE	AMMONIUM
DATE	RETENTION TIME(HRS)	FLOW (1000 M3)				
JAN 11	21.0	17.0	00.60	04.05	00.20	00.30
FEB 08	21.0	17.0	00.51	04.05	00.51	00.20
MAR 14	.2	17.7	00.51	04.05	00.20	00.20
APR 11	22.0	17.0	00.60	04.05	00.30	00.20
MAY 09	15.0	24.0	00.39	04.05	00.20	00.15
JUN 13	6.0	55.5	00.51	04.05	00.20	00.20
JUL 11	12.0	32.0	00.39	04.05	00.39	00.15
AUG 08	11.2	32.0	00.51	04.05	00.25	00.20
SEP 12	14.4	25.0	00.76	04.05	00.25	00.20
OCT 11	18.0	20.0	00.51	04.05	00.25	00.25
NOV 14	14.0	26.0	00.51	04.05	00.25	00.25
DEC 12	20.0	18.0	00.51	04.05	00.25	00.25

TABLE 3

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE (STEELTON WELL) SAMPLE DAY CONDITIO 1988

SAMPLE DAY CONDITIONS			TREATMENT CHEMICAL DOSAGES (MG/L)	
			POST-CHLORINATION	CHLORAMINATION
			CHLORINE	AMMONIUM
DATE	RETENTION TIME(HRS)	FLOW (1000 M3)		
JAN 11	7.7	8.5	00.20	00.60
FEB 08	7.6	8.5	00.30	00.10
MAR 14	.2	8.5	00.30	00.10
APR 11	8.0	8.5	00.30	00.10
MAY 09	8.0	8.4	00.30	00.10
JUN 13	7.7	8.5	00.30	00.10
JUL 11	7.0	9.0	00.15	00.39
AUG 08	7.6	8.6	00.30	00.10
SEP 12	8.0	8.9	00.30	00.10
OCT 11	8.0	8.9	00.30	00.10
NOV 14	7.5	8.8	00.30	00.10
DEC 12	7.4	8.7	00.30	00.10

TABLE 3

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE (LORNA WELL) SAMPLE DAY CONDITIONS 1988

SAMPLE DAY CONDITIONS			TREATMENT CHEMICAL DOSAGES (MG/L)	
			CHLORAMINATION	POST-CHLORINATION
			AMMONIUM	CHLORINE
DATE	RETENTION TIME(HRS)	FLOW (1000 M3)		
JAN 11	.5	3.0	00.60	00.20
FEB 08	.2	3.0	00.10	00.30
MAR 14	.2	2.2	00.10	00.30
APR 11	.5	1.5	00.10	00.30
MAY 09	.5	2.2	00.10	00.30
JUN 13	.5	6.8	00.10	00.30
JUL 11	.3	1.0	00.10	00.30
AUG 08	.5	.8	00.10	00.30
SEP 12	.5	.3	00.10	00.30
OCT 11	.5	1.0	00.10	00.30
NOV 14	.5	.7	00.10	00.30
DEC 12	.3	1.0	00.10	00.30

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
		RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
BACTERIOLOGICAL	FECAL COLIFORM MF	12	0	0	.	.	.	.	.	.	.	.	.	11	0	0	.	.	.	12	0	0	.	.	.
	STANDRD PLATE CNT MF	8	6	0	12	4	0	12	8	0	10	6	0	8	3	0	12	6	0	8	4	0	12	8	0
	P/A BOTTLE	.	.	.	8	0	0	8	0	0	6	0	0	.	.	.	8	0	0	.	.	.	8	0	0
	TOTAL COLIFORM MF	11	7	0	12	0	0	12	0	0	10	0	0	12	0	0	12	2	0	12	0	0	12	0	0
	T COLIFORM BCKGRD MF	12	11	0	12	1	0	12	0	0	10	0	0	12	1	0	12	3	0	12	1	0	12	1	0
*TOTAL SCAN BACTERIOLOGICAL		43	24	0	44	5	0	44	8	0	36	6	0	43	4	0	44	11	0	44	5	0	44	9	0
*TOTAL GROUP BACTERIOLOGICAL		43	24	0	44	5	0	44	8	0	36	6	0	43	4	0	44	11	0	44	5	0	44	9	0
CHEMISTRY (FLD)	FLD CHLORINE (COMB)	.	.	.	12	12	0	14	14	0	11	11	0	.	.	.	12	12	0	.	.	.	12	12	0
	FLD CHLORINE FREE	.	.	.	1	1	0	.	.	.	2	2	0	.	.	.	1	1	0	.	.	.	2	2	0
	FLD CHLORINE (TOTAL)	.	.	.	12	12	0	14	14	0	18	18	0	.	.	.	12	12	0	.	.	.	12	12	0
	FLD PH	11	11	0	12	12	0	24	24	0	20	20	0	12	12	0	12	12	0	12	12	0	12	12	0
	FLD TEMPERATURE	12	12	0	12	12	0	24	24	0	20	20	0	12	12	0	12	12	0	12	12	0	12	12	0
	FLD TURBIDITY	12	12	0	12	12	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN CHEMISTRY (FLD)		35	35	0	61	61	0	76	76	0	71	71	0	24	24	0	49	49	0	24	24	0	50	50	0
CHEMISTRY (LAB)	ALKALINITY	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	CALCIUM	12	12	0	11	11	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	CYANIDE	12	0	0	12	0	0	12	0	0	10	0	0	12	0	0	12	0	1	12	0	0	12	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
CHEMISTRY (LAB)	CHLORIDE	12	10	2	11	11	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	COLOUR	12	1	11	12	0	10	24	0	22	19	0	18	12	0	10	12	1	7	12	5	7	12	3	8
	CONDUCTIVITY	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	12	12	0
	FLUORIDE	12	0	11	11	2	9	24	12	12	19	2	17	12	8	3	12	7	4	12	11	0	11	9	1
	HARDNESS	12	12	0	11	11	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	IONCAL	12	5	0	12	5	0	24	10	0	20	9	0	12	5	0	12	5	0	12	5	0	12	5	0
	LANGELIERS INDEX	4	4	0	4	4	0	9	9	0	6	6	0	4	4	0	4	4	0	12	12	0	11	11	0
	MAGNESIUM	12	12	0	11	11	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	SODIUM	12	10	2	11	10	1	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	AMMONIUM TOTAL	12	7	4	11	11	0	24	24	0	19	16	3	12	6	6	12	10	2	12	12	0	11	10	1
	NITRITE	12	3	8	11	3	7	24	23	1	19	9	10	12	1	9	12	1	7	12	2	9	11	4	6
	TOTAL NITRATES	12	12	0	11	11	0	24	23	1	19	19	0	12	12	0	12	12	0	12	0	3	11	2	2
	NITROGEN TOT KJELD	12	9	3	11	11	0	24	19	5	19	12	7	12	1	8	12	7	4	12	9	3	11	11	0
	PH	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	11	11	0
	PHOSPHORUS FIL REACT	12	1	9	11	1	9	.	.	.	.	.	.	12	3	9	12	9	3	12	9	3	11	10	1
	PHOSPHORUS TOTAL	12	0	10	11	1	6	.	.	.	.	.	.	12	0	9	12	0	9	12	1	9	11	1	9
	SULPHATE	5	5	0	5	5	0	10	10	0	9	9	0	5	5	0	5	5	0	5	5	0	5	5	0
	TURBIDITY	12	12	0	11	10	1	24	20	4	19	17	2	12	9	2	12	8	3	12	9	3	11	6	4
*TOTAL SCAN CHEMISTRY	(LAB)	237	151	60	224	154	43	415	342	45	330	251	57	237	150	56	237	165	40	245	176	37	229	166	32
METALS	SILVER	12	0	1	12	0	4	24	1	12	19	0	10	12	0	5	12	0	8	12	0	6	12	0	5

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

SCAN	PARAMETER	WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
		SITE RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
		TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
METALS	ALUMINUM	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	12	12	0
	ARSENIC	12	0	12	12	0	12	24	3	21	19	0	19	12	0	12	12	0	12	12	0	12	12	11	1
	BARIUM	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	12	12	0
	BORON	12	3	9	12	1	11	24	15	9	19	4	15	12	6	6	12	4	8	12	12	0	12	11	1
	BERYLLIUM	12	0	7	12	0	6	24	0	14	19	0	9	12	0	7	12	0	4	12	0	9	12	0	8
	CADMIUM	12	0	0	12	0	1	24	0	4	19	0	5	12	0	0	12	0	0	12	0	2	12	0	1
	COBALT	12	0	11	12	0	11	24	1	21	19	0	19	12	0	10	12	0	12	12	0	11	12	0	12
	CHROMIUM	12	4	7	12	3	9	24	9	13	19	5	14	12	12	0	12	12	0	12	7	2	12	4	4
	COPPER	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	8	4	12	12	0
	IRON	12	0	10	12	1	6	24	0	22	19	3	16	12	0	3	12	0	2	12	0	5	12	0	7
	MERCURY	12	5	3	12	5	2	12	8	3	10	6	4	12	5	3	12	5	2	12	6	1	12	5	2
	MANGANESE	12	11	1	12	2	10	24	24	0	19	19	0	12	0	11	12	0	10	12	12	0	12	12	0
	MOLYBDENUM	12	0	12	12	0	12	24	7	17	19	1	18	12	2	10	12	1	11	12	12	0	12	11	1
	NICKEL	12	0	7	12	0	4	24	8	6	19	9	3	12	1	1	12	1	1	12	1	0	12	1	1
	LEAD	12	0	12	12	2	9	24	22	2	19	19	0	12	1	9	12	7	5	12	4	8	12	3	9
	ANTIMONY	12	5	7	12	5	7	24	12	11	19	10	9	12	5	4	12	5	3	12	5	5	12	5	4
	SELENIUM	12	0	6	12	0	7	24	0	13	19	0	13	12	0	9	12	0	7	12	0	12	12	0	11
	STRONTIUM	12	12	0	12	12	0	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	12	12	0
	TITANIUM	12	11	1	12	11	1	24	24	0	19	19	0	12	12	0	12	12	0	12	12	0	12	12	0
	THALLIUM	12	0	3	12	0	3	24	0	7	19	0	5	12	0	1	12	0	5	12	0	2	12	0	2
	URANIUM	12	0	12	12	0	11	24	22	2	19	19	0	12	12	0	12	12	0	12	12	0	12	12	0
	VANADIUM	12	0	12	12	2	10	24	22	2	19	19	0	12	12	0	12	12	0	12	1	11	12	1	11
	ZINC	12	8	4	12	1	11	24	24	0	19	19	0	12	1	11	12	7	4	12	9	3	12	6	6

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
*TOTAL SCAN METALS		288	95	137	288	81	147	564	298	179	447	228	159	288	117	102	288	126	94	288	149	81	288	142	86
*TOTAL GROUP INORGANIC & PHYSICAL		560	281	197	573	296	190	1055	716	224	848	550	216	549	291	158	574	340	134	557	349	118	567	358	118
CHLOROAROMATICS	HEXACHLOROBUTADIENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	123 TRICHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	1234 T-CHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	1235 T-CHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	124 TRICHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	1245 T-CHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	135 TRICHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	HCB	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	HEXACHLOROETHANE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	OCTACHLOROSTYRENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	PENTACHLOROBENZENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	236 TRICHLOROTOLUENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	245 TRICHLOROTOLUENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	26A TRICHLOROTOLUENE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
*TOTAL SCAN CHLOROAROMATICS		154	0	0	168	0	0	168	0	0	140	0	0	168	0	0	140	0	0	168	0	0	168	0	0
CHLOROPHENOLS	234 TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0

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DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
CHLOROPHENOLS	2345 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	2356 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	245-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	246-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	PENTACHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
*TOTAL SCAN CHLOROPHENOLS		12	0	0	12	0	0	0	0	0	0	0	0	12	0	0	12	0	0	12	0	0	12	0	0
PAH	PHENANTHRENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	ANTHRACENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	FLUORANTHENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	PYRENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(A)ANTHRACENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	CHRYSENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	DIMETH. BENZ(A)ANTHR	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(E) PYRENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(J) FLUORANTHEN	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0	0	0	0	0	0	0	0	0
	BENZO(B) FLUORANTHEN	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	PERYLENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(K) FLUORANTHEN	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(A) PYRENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(G,H,I) PERYLEN	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
		SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
PAH	DIBENZO(A,H) ANTHRAC	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	INDENO(1,2,3-C,D) PY	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	BENZO(B) CHRYSENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
	ANTHANTHRENE	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0	0	0	0	0	0	0	0	0
	CORONENE	12	0	0	12	0	0	.	.	.	.	.	.	11	0	0	11	0	0	12	0	0	12	0	0
*TOTAL SCAN PAH		204	0	0	204	0	0	0	0	0	0	0	0	187	0	0	187	0	0	204	0	0	204	0	0
PESTICIDES & PCB	ALDRIN	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	ALPHA BHC	11	0	11	12	0	10	12	0	10	10	0	9	12	0	0	10	0	0	12	0	0	12	0	1
	BETA BHC	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	LINDANE	11	0	1	12	0	3	12	0	1	10	0	1	12	0	0	10	0	1	12	0	0	12	0	0
	ALPHA CHLORDANE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	GAMMA CHLORDANE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	DIELDRIN	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	METHOXYCHLOR	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	ENDOSULFAN 1	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	ENDOSULFAN II	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	ENDRIN	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	ENDOSULFAN SULPHATE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	HEPTACHLOR EPOXIDE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	HEPTACHLOR	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
PESTICIDES & PCB	MIREX	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	OXYCHLORDANE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	OPDDT	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	PCB	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	DDD	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	PPDDE	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	PPDDT	11	0	0	12	0	0	12	0	0	10	0	0	12	0	0	10	0	0	12	0	0	12	0	0
	AMETRINE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	ATRAZINE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	ATRATONE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	CYANAZINE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	DES ETHYL ATRAZINE	6	0	0	6	0	0	6	0	0	5	0	0	5	0	0	5	0	0	6	0	0	6	0	0
	DES ETHYL SIMAZINE	6	0	0	6	0	0	6	0	0	5	0	0	5	0	0	5	0	0	6	0	0	6	0	0
	PROMETONE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	PROPAZINE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	PROMETRYNE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	METRIBUZIN	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	SIMAZINE	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	ALACHLOR	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
	METOLACHLOR	12	0	0	12	0	0	11	0	0	10	0	0	11	0	0	11	0	0	11	0	0	12	0	0
*TOTAL SCAN PESTICIDES & PCB		375	0	12	396	0	13	385	0	11	330	0	10	383	0	0	341	0	1	385	0	0	396	0	1

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
PHENOLICS	PHENOLICS	12	1	6	12	1	5	.	.	.	.	.	.	10	1	3	11	0	3	12	1	3	12	2	2
*TOTAL SCAN PHENOLICS		12	1	6	12	1	5	0	0	0	0	0	0	10	1	3	11	0	3	12	1	3	12	2	2
SPECIFIC PESTICIDES	TOXAPHENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2,4,5-T	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	2,4-D	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	24DCHLRPHENOXYBUTYRC	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	2,4 D PROPIONIC ACID	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	DICAMBA	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	PICHLORAM	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0	0	0	0	0	0	0	0	0
	SILVEX	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	DIAZINON	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	DICHLOROVOS	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	CHLORPYRIFOS	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	ETHION	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	AZINPHOS-METHYL	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0	0	0	0	0	0	0	0	0
	MALATHION	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	MEVINPHOS	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	METHYL PARATHION	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	METHYLTRITHION	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	PARATHION	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
SPECIFIC PESTICIDES	PHORATE	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	RELDAN	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	RONNEL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	AMINOCARB	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0	0	0	0	0	0	0	0	0
	BENOMYL	1	0	0	1	0	0	.	.	.	.	.	.	1	0	0	1	0	0	1	0	0	1	0	0
	BUX	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	CARBOFURAN	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	CICP	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	DIALLATE	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	EPTAM	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	IPC	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	PROPOXUR	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	CARBARYL	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
	BUTYLATE	2	0	0	2	0	0	.	.	.	.	.	.	2	0	0	2	0	0	2	0	0	2	0	0
*TOTAL SCAN SPECIFIC PESTICIDES		55	0	0	55	0	0	0	0	0	0	0	0	55	0	0	55	0	0	55	0	0	55	0	0
VOLATILES	BENZENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	TOLUENE	11	0	0	11	3	2	11	0	0	9	2	1	11	1	1	11	1	1	10	1	1	11	1	0
	ETHYLBENZENE	11	0	3	11	0	8	11	0	1	9	0	3	11	0	6	11	0	10	10	0	6	11	0	8
	P-XYLENE	11	0	0	11	1	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	1
	M-XYLENE	11	0	0	11	0	2	11	0	0	9	0	1	11	0	1	11	0	1	10	0	0	11	1	1

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
	SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
VOLATILES	O-XYLENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	1
	STYRENE	3	1	2	3	0	3	3	0	3	3	0	3	3	0	2	3	0	3	3	1	1	3	0	3
	1,1 DICHLOROETHYLENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	METHYLENE CHLORIDE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	1	0	11	0	0
	T1,2DICHLOROETHYLENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	1,1 DICHLOROETHANE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	CHLOROFORM	11	0	2	11	11	0	11	10	1	9	9	0	11	0	4	11	3	6	10	0	3	11	2	7
	111, TRICHLOROETHANE	11	0	1	11	0	0	11	0	0	9	0	0	11	0	0	11	0	2	10	0	0	11	0	0
	1,2 DICHLOROETHANE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	CARBON TETRACHLORIDE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	1,2 DICHLOROPROPANE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	TRICHLOROETHYLENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	DICHLOROBROMOMETHANE	11	0	1	11	11	0	11	10	1	9	9	0	11	0	2	11	4	6	10	0	0	11	2	1
	112 TRICHLOROETHANE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	CHLORODIBROMOMETHANE	11	0	0	11	0	11	11	0	10	9	0	9	11	0	0	11	2	3	10	0	0	11	0	2
	T-CHLOROETHYLENE	11	0	0	11	0	1	11	0	2	9	0	1	11	0	4	11	0	4	10	0	0	11	0	0
	BROMOFORM	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	2	10	0	0	11	0	0
	1122 T-CHLOROETHANE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	CHLOROBENZENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	1,4 DICHLOROBENZENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	1,3 DICHLOROBENZENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	1,2 DICHLOROBENZENE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	0
	TRIFLUOROCHLOROTOLUE	5	0	0	5	0	0	5	0	0	4	0	0	5	0	0	5	0	0	4	0	0	5	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY

SUMMARY TABLE OF RESULTS (1988)

		WATER TREATMENT PLANT						DISTRIBUTION SYSTEM						STEELTON WELL						LORNA WELL					
		SITE	RAW			TREATED			SITE 1			SITE 2			RAW			TREATED			RAW			TREATED		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
VOLATILES	ETHLYENE DIBROMIDE	11	0	0	11	0	0	11	0	0	9	0	0	11	0	0	11	0	0	10	0	0	11	0	1
	TOTL TRIHALOMETHANES	11	0	0	11	11	0	11	9	2	9	9	0	11	0	0	11	4	1	10	0	1	11	1	2
*TOTAL SCAN VOLATILES		316	1	9	316	37	27	316	29	20	259	29	18	316	1	20	316	14	39	287	3	12	316	7	27
*TOTAL GROUP ORGANIC		1128	2	27	1163	38	45	869	29	31	729	29	28	1131	2	23	1062	14	43	1123	4	15	1163	9	30
TOTAL		1731	307	224	1780	339	235	1968	753	255	1613	585	244	1723	297	181	1680	365	177	1724	358	133	1774	376	148

KEY TO TABLE 5 and 6

A ONTARIO DRINKING WATER OBJECTIVES (ODWO)
1. Maximum Acceptable Concentration (MAC)
1+. MAC for Total Trihalomethanes
1*. MAC for Bacteriological Analyses
Poor water quality is indicated when :
- total coliform counts > 0 < 5
- P/A Bottle Test is present after 48 hours
- Aeromonas organisms are detected in more than 25% of samples in a single submission or in successive submissions from the same sampling site
- Pseudomonas Aeruginosa, Staphylococcus Aureus and members of the Fecal Streptococcus group should not be detected in any sample
- Standard Plate Count should not exceed 500 organisms per ml at 35 ^{0}C within 48 hours

2. Interim Maximum Acceptable Concentration (IMAC)
3. Maximum Desirable Concentration (MDC)
4. Aesthetic or Recommended Operational Guideline
- hardness levels between 80 and 100 mg/L as calcium carbonate are considered to provide an acceptable balance between corrosion and incrustation, water supplies with a hardness >200 mg/L are considered poor and those in excess of 500 mg/L are unacceptable.

B HEALTH & WELFARE CANADA (H&W)
1. Maximum Acceptable Concentration (MAC)
2. Proposed MAC
3. Interim MAC
4. Aesthetic Objective (AO) (for xylenes, the AO is a total)

C WORLD HEALTH ORGANIZATION (WHO)
1. Guideline Value (GV)
2. Tentative GV
3. Aesthetic GV

D US ENVIRONMENTAL PROTECTION AGENCY (EPA)
1. Maximum Contaminant Level (MCL)
2. Suggested No-Adverse Effect Level (SNAEL)
3. Lifetime Health Advisory
4. EPA Ambient Water Quality Criteria

F EUROPEAN ECONOMIC COMMUNITY (EEC)
1. Health Related Guideline Level
2. Aesthetic Guideline Level
3. Maximum Admissable Concentration (MADC)

G CALIFORNIA STATE DEPARTMENT OF HEALTH-GUIDELINE VALUE

H USSR MAXIMUM PERMISSIBLE CONCENTRATION

I NEW YORK STATE AMBIENT WATER GUIDELINE

N/A NONE AVAILABLE

LABORATORY RESULTS, REMARK DESCRIPTIONS

.	No Sample Taken
BDL	Below Minimum Measurable Amount
<T	Greater Than Detection Limit But Not Confident
>	Results Are Greater Than The Upper Limit
<=>	Approximate Result
!AW	No Data: Analysis Withdrawn
!CR	No Data: Could Not Confirm By Reanalysis
!CS	No Data: Contamination Suspected
!IL	No Data: Sample Incorrectly Labelled
!IS	No Data: Insufficient Sample
!LA	No Data: Laboratory Accident
!LD	No Data: Test Queued After Sample Discarded
!NA	No Data: No Authorization To Perform Reanalysis
!NP	No Data: No Procedure
!NR	No Data: Sample Not Received
!OP	No Data: Obscured Plate
!PE	No Data: Procedural Error - Sample Discarded
!PH	No Data: Sample pH Outside Valid Range
!RO	No Data: See Attached Report (no numeric results)
!SM	No Data: Sample Missing
!SS	No Data: Send Separate Sample Properly Preserved
!UI	No Data: Indeterminant Interference
!TX	No Data: Time Expired
A3C	Approximate, Total Count Exceeded 300 Colonies
APL	Additional Peak, Large, Not Priority Pollutant
APS	Additional Peak, Less Than, Not Priority Pollutant
CIC	Possible Contamination, Improper Cap
CRO	Calculated Result Only
PPS	Test Performed On Preserved Sample

RMP	P and M-Xylene Not Separated
RRV	Rerun Verification
RVU	Reported Value Unusual
SPS	Several Peaks, Small, Not Priority Pollutant
UAL	Unreliable: Sample Age Exceeds Normal Limit
UCR	Unreliable: Could Not Confirm By Reanalysis
UCS	Unreliable: Contamination Suspected
UIN	Unreliable: Indeterminant Interference
XP	Positive After X Number of Hours

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM					STEELTON WELL		LORNA WELL	
	RAW	TREATED	SITE 1		SITE 2			RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW					
BACTERIOLOGICAL											
FECAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 0 (A1)						
JAN	0	.	.	.	.	.		0	.	0	.
FEB	0	.	.	.	.	.		0	.	0	.
MAR	0	.	.	.	.	.		0	.	0	.
APR	0	.	.	.	.	.		0	.	0	.
MAY	0	.	.	.	.	.		0	.	0	.
JUN	0	.	.	.	.	.		0	.	0	.
JUL	0	.	.	.	.	.		0	.	0	.
AUG	0	.	.	.	.	.		0	.	0	.
SEP	0 T48	.	.	.	.	.		0 T48	.	0 T48	.
OCT	0 T48	.	.	.	.	.		0 T48	.	0 T48	.
NOV	0 T48	.	.	.	.	.		0 T48	.	0 T48	.
DEC	0 T24	.	.	.	.	.		!LA	.	0 T24	.
STANDRD PLATE CNT MF (CT/ML)			DET'N LIMIT = 0		GUIDELINE = 500/ML (A1)						
JAN	5	4	.	48	.	0		0	0	0	1
FEB	0	0	.	2	.	0		0	0	0	1
MAR	38	0	.	0	.	.		0	1	15	1
APR	1	0	.	4	.	2		3	1	15	1
MAY	0	0	.	3	.	2		6	39	15	5
JUN	5	3	.	5	.	12		0	0	0	4
JUL	18	1	.	36	.	.		0	220	0	0
AUG	1300	0	.	1200	.	460		96	38	22	2400 >

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
SEP	.	2 <=>	.	42 T48	.	129 T48	.	28 T48	.	310 T48
OCT	.	0 <=>	.	3 <=>	.	10 T48	.	4 <=>	.	4 <=>
NOV	.	1 <=>	.	2 <=>	.	9 <=>	.	2 <=>	.	4 <=>
DEC	.	29 T24	.	1 <=>	.	0 <=>	.	6 <=>	.	7 <=>
P/A BOTTLE (0=ABSENT)			DET'N LIMIT = 0		GUIDELINE = 0 (A1*)					
JAN	.	0	.	0	.	0	.	0	.	0
FEB	.	0	.	0	.	0	.	0	.	0
MAR	.	0	.	0	.	.	.	0	.	0
APR	.	0	.	0	.	0	.	0	.	0
MAY	.	0	.	0	.	0	.	0	.	0
JUN	.	0	.	0	.	0	.	0	.	0
JUL	.	0	.	0	.	.	.	0	.	0
AUG	.	0	.	0	.	0	.	0	.	0
TOTAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 5/100ML(A1)					
JAN	2	0	.	0	.	0	0	0	0	0
FEB	BDL	0	.	0	.	0	0	0	0	0
MAR	0	0	.	0	.	.	0	0	0	0
APR	1	0	.	0	.	0	0	0	0	0
MAY	0	0	.	0	.	0	0	0	0	0
JUN	BDL	0	.	0	.	0	BDL	0	BDL	0
JUL	4	0	.	0	.	.	0	3	0	0

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
	SITE TYPE RAW	TREATED	SITE 1 STANDING	SITE 1 FREE FLOW	SITE 2 STANDING	SITE 2 FREE FLOW	RAW	TREATED	RAW	TREATED
AUG	1OP	0	.	0	.	0	0	0	0	0
SEP	3 A3C	0 T48	.	0 T48	.	0 T48	0 T48	1 T48	0 T48	0 T48
OCT	4 T48	0 T48	.	0 T48	.	0 T48	0 T48	0 T48	0 T48	0 T48
NOV	3 A3C	0 T48	.	0 T48	.	0 T48	0 T48	0 T48	0 T48	0 T48
DEC	2 T24	0 T24	.	0 T24	.	0	0	0 T24	0 T24	0 T24
T COLIFORM BCKGRD MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = N/A					
JAN	9	0	.	0	.	0	0	0	0	0
FEB	BDL	0	.	0	.	0	0	0	0	0
MAR	41	0	.	0	.	.	0	0	0	0
APR	2	0	.	0	.	0	0	0	3	0
MAY	5	0	.	0	.	0	0	2	0	0
JUN	6	0	.	0	.	0	BDL	0	BDL	0
JUL	7	1	.	0	.	.	0	112	0	0
AUG	50000	0	.	0	.	0	0	6	0	2400 >
SEP	2400 >	0 T48	.	0 T48	.	0 T48	0 T48	0 T48	0 T48	0 T48
OCT	170 T48	0 T48	.	0 T48	.	0 T48	0 T48	0 T48	0 T48	0 T48
NOV	460 A3C	0 T48	.	0 T48	.	0 T48	0 T48	0 T48	0 T48	0 T48
DEC	11 T24	0 T24	.	0 T24	.	0	50	0 T24	0 T24	0 T24

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
CHEMISTRY (FLD)										
FLD CHLORINE (COMB) (MG/L)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.	.500	.	.100	.	.	.	.400	.	.400
FEB	.	.600	.	.250	.	.	.	.400	.	.300
MAR	.	.300	.	.250	.	.	.	.500	.	.400
APR	.	.500	.	.250	.	.	.	.500	.	.400
MAY	.	.700	.	.200	.100	.100	.	.400	.	.400
JUN	.	.680	.	.100	.100	.100	.	.300	.	.300
JUL	.	.400	.	.100	.	.	.	.400	.	.400
AUG	.	.440	.	.100	.	.100	.	.400	.	.300
SEP	.	.510	.100	.200	.100	.100	.	.300	.	.300
OCT	.	.580	.100	.100	.	.	.	.400	.	.400
NOV	.	.400	.	.250	.100	.100	.	.300	.	.300
DEC	.	.720	.	.100	.100	.100	.	.300	.	.300
FLD CHLORINE FREE (MG/L)			DET'N LIMIT = N/A		GUIDELINE = N/A					
FEB	.	.	.	.	.100	.100	.	.	.	.
MAR	.	.	.	.	.	.	.	.	.	.100
MAY	.	.100	.	.	.	.	.	.	.	.
JUN	.	.	.	.	.	.	.	.100	.	.100
FLD CHLORINE (TOTAL) (MG/L)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.	.500	.	.100	.	.100	.	.500	.	.400

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
FEB	.	.600	.	.250	.100	.100	.	.400	.	.300
MAR	.	.300	.	.250	.	.	.	.500	.	.500
APR	.	.500	.	.250	.100	.100	.	.500	.	.400
MAY	.	.800	.	.200	.100	.100	.	.500	.	.400
JUN	.	.680	.	.100	.100	.100	.	.400	.	.400
JUL	.	.400	.	.100	.	.	.	.400	.	.400
AUG	.	.440	.	.100	.	.100	.	.400	.	.300
SEP	.	.510	.100	.200	.100	.100	.	.300	.	.300
OCT	.	.580	.100	.100	.100	.100	.	.400	.	.400
NOV	.	.400	.	.250	.100	.100	.	.300	.	.300
DEC	.	.720	.	.100	.100	.100	.	.300	.	.300
FLD PH (DIMENSIONLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)					
JAN	8.000	6.900	7.800	7.500	7.500	7.400	7.500	7.500	7.800	8.000
FEB	8.000	7.400	7.500	7.800	7.600	7.500	7.500	7.800	7.000	7.000
MAR	8.000	7.100	7.800	8.000	.	.	7.800	7.400	8.100	7.200
APR	7.900	7.900	7.400	7.500	7.500	7.500	7.500	7.500	8.000	8.000
MAY	7.700	7.200	7.700	7.700	7.700	7.400	7.700	7.600	8.500	8.200
JUN	8.100	7.100	7.500	7.500	7.500	7.500	7.400	7.400	8.200	8.200
JUL	8.000	7.700	7.400	7.500	.	.	7.400	7.200	8.000	7.800
AUG	8.000	7.900	7.500	7.600	7.600	7.700	7.400	7.400	8.000	8.000
SEP	.	7.800	7.800	7.600	7.500	7.600	7.600	7.600	8.400	8.000
OCT	7.800	7.800	7.600	7.600	7.700	7.600	7.500	7.400	8.400	8.400
NOV	7.700	8.000	7.500	7.500	7.600	7.600	7.400	7.200	8.000	8.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
DEC	7.700	7.900	7.600	7.500	7.700	7.500	7.400	7.200	8.200	8.000
FLD TEMPERATURE (DEG.C)			DET'N LIMIT = N/A		GUIDELINE = 15 (A1)					
JAN	1.000	3.000	14.000	6.000	14.000	7.600	7.500	7.500	6.000	6.000
FEB	.800	.800	12.000	8.000	13.500	7.500	7.000	7.000	8.000	8.000
MAR	.700	1.000	13.000	4.000	.	.	8.000	8.000	7.000	7.000
APR	.700	.700	14.000	4.000	12.000	4.500	8.500	8.500	7.000	7.000
MAY	2.500	2.400	16.500	7.500	10.000	6.000	8.600	8.500	9.500	9.400
JUN	9.100	9.400	19.000	10.500	14.000	10.000	8.500	8.500	9.000	10.000
JUL	12.600	12.600	22.000	16.000	.	.	9.000	10.000	10.000	12.000
AUG	16.400	16.000	22.000	18.000	19.200	15.500	8.000	8.000	8.000	8.000
SEP	13.300	13.300	19.500	16.500	18.000	15.500	8.000	8.000	8.000	8.000
OCT	12.900	11.900	16.000	14.000	18.000	14.500	8.000	8.000	8.000	10.000
NOV	8.300	7.700	16.000	10.000	17.000	11.000	8.000	8.000	9.500	9.500
DEC	5.100	6.000	11.000	8.000	14.000	8.500	7.000	7.000	9.000	9.000
FLD TURBIDITY (FTU)			DET'N LIMIT = N/A		GUIDELINE = 1.0 (A1)					
JAN	.300	.200	.	.	.	.	.	.	.	.
FEB	.700	.300	.	.	.	.	.	.	.	.
MAR	.300	.200	.	.	.	.	.	.	.	.
APR	.300	.200	.	.	.	.	.	.	.	.
MAY	.400	.200	.	.	.	.	.	.	.	.
JUN	.300	.200	.	.	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
JUL	.400	.100	.	.	.	.	.	.	.	.
AUG	.300	.100	.	.	.	.	.	.	.	.
SEP	.500	.100	.	.	.	.	.	.	.	.
OCT	.600	.100	.	.	.	.	.	.	.	.
NOV	.500	.100	.	.	.	.	.	.	.	.
DEC	.500	.100	.	.	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
CHEMISTRY (LAB)										
ALKALINITY (MG/L)			DET'N LIMIT = .200		GUIDELINE = 30-500 (A4)					
JAN	44.300	40.400	51.100	50.200	49.700	50.200	56.700	56.800	92.900	96.100
FEB	44.900	43.200	64.000	90.200	48.400	48.100	54.900	55.000	94.100	IIS
MAR	47.000	45.900	85.300	90.700	.	.	55.200	55.400	95.000	69.200
APR	45.300	42.700	49.500	48.900	49.000	49.600	59.300	59.400	95.500	54.900
MAY	45.000	43.700	80.600	76.900	50.500	49.200	56.900	57.400	98.000	98.400
JUN	45.600	38.300	45.600	45.300	47.600	47.100	55.500	54.500	96.600	97.200
JUL	45.000	42.900	46.900	46.000	.	.	55.400	55.200	96.300	95.700
AUG	44.800	43.100	46.900	45.400	47.200	47.600	54.800	56.200	97.200	97.400
SEP	45.300	42.300	50.200	46.600	46.700	46.600	54.600	52.000	96.200	96.500
OCT	45.100	43.200	48.200	44.900	47.100	IRE	55.100	54.600	96.200	96.400
NOV	44.200	42.700	48.000	46.800	47.300	47.000	56.700	56.700	96.100	95.500
DEC	45.100	42.900	58.900	48.400	50.300	50.300	58.100	58.000	97.800	97.000
CALCIUM (MG/L)			DET'N LIMIT = .100		GUIDELINE = 100 (F2)					
JAN	14.200	14.200	21.200	20.800	19.800	19.600	23.800	24.400	42.600	27.600
FEB	13.800	IIS	22.200	39.800	19.000	19.200	23.000	23.400	42.200	IIS
MAR	14.200	13.800	34.800	36.600	.	.	22.400	23.000	40.000	23.400
APR	13.800	14.200	19.000	18.600	19.200	19.600	25.200	25.200	40.200	21.400
MAY	13.200	13.800	18.200	18.800	18.800	17.800	22.600	23.200	37.800	36.600
JUN	14.200	14.400	16.400	15.800	18.200	17.800	23.200	24.000	36.400	36.600
JUL	14.400	14.600	17.000	17.200	.	.	25.800	24.200	43.400	43.000
AUG	13.800	14.000	17.200	16.000	17.200	17.600	25.300	25.000	37.200	36.900

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
SEP	15.200	15.000	19.400	18.200	18.600	18.800	25.800	23.200	38.600	37.200
OCT	15.600	14.400	18.600	16.600	19.200	IRE	26.400	26.200	36.600	36.000
NOV	14.600	14.800	19.600	17.600	18.200	17.800	25.800	24.600	37.000	36.600
DEC	14.800	14.200	25.000	19.400	20.800	20.400	25.600	25.600	35.600	35.200
CYANIDE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = .200 (A1)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
FEB	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	.003 <T	BDL	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
CHLORIDE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 250 (A3)					
JAN	1.400	2.400	9.800	9.800	8.400	8.300	14.300	14.800	58.100	28.000
FEB	1.400	ILA	18.700	53.400	9.000	8.600	14.300	14.900	55.900	IIS
MAR	1.400	2.100	45.900	50.900	.	.	14.700	15.200	55.100	19.700

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
APR	2.000	2.100	9.000	8.900	8.900	8.900	14.000	14.600	56.400	12.700
MAY	1.400	2.100	15.200	13.700	8.500	7.800	15.200	15.600	52.300	52.400
JUN	.700 <T	1.500	4.600	4.300	6.400	6.400	15.900	16.300	48.500	48.600
JUL	1.400	2.300	5.700	5.900	.	.	16.000	16.100	56.900	58.100
AUG	.900 <T	1.800	6.200	4.500	6.300	6.400	18.400	18.700	50.200	50.900
SEP	1.200	2.000	9.200	6.300	5.800	5.800	17.800	14.600	48.200	48.400
OCT	1.600	2.200	7.000	3.200	5.700	IRE	18.500	18.800	44.100	46.100
NOV	1.300	2.100	9.400	6.000	6.000	6.100	18.600	18.900	48.500	47.900
DEC	1.500	2.200	15.800	9.300	10.900	10.400	17.100	17.500	44.100	43.900
COLOUR (TCU)			DET'N LIMIT = .5		GUIDELINE = 5.0 (A3)					
JAN	2.000 <T	1.000 <T	1.000 <T	1.000 <T	1.000 <T	1.000 <T	.500 <T	.500 <T	2.500	2.500
FEB	1.000 <T	BDL	1.000 <T	1.500 <T	.500 <T	.500 <T	BDL	BDL	2.000 <T	BDL
MAR	2.000 <T	1.000 <T	1.500 <T	2.000 <T	.	.	BDL	BDL	2.000 <T	1.000 <T
APR	1.000 <T	BDL	BDL	BDL	BDL	.500 <T	.500 <T	BDL	2.500	.500 <T
MAY	2.000 <T	1.500 <T	2.000 <T	2.000 <T	1.000 <T	1.000 <T	.500 <T	.500 <T	2.000 <T	2.000 <T
JUN	2.500	1.500 <T	1.500 <T	1.500 <T	1.500 <T	1.500 <T	.500 <T	.500 <T	3.000	2.500
JUL	2.000 <T	.500 <T	1.000 <T	1.000 <T	.	.	.500 <T	.500 <T	2.000 <T	2.000 <T
AUG	2.000 <T	1.000 <T	1.000 <T	.500 <T	2.000 <T	1.500 <T	.500 <T	.500	2.000 <T	2.000 <T
SEP	1.500 <T	.500 <T	1.000 <T	.500 <T	.500 <T	.500 <T	.500 <T	.500 <T	2.500	1.500 <T
OCT	2.000 <T	1.000 <T	1.000 <T	1.000 <T	1.000 <T	IRE	1.000 <T	1.000 <T	2.500	2.500
NOV	1.500 <T	.500 <T	.500 <T	.500 <T	.500 <T	1.000 <T	.500 <T	BDL	2.000 <T	1.500 <T
DEC	2.000 <T	.500 <T	1.500 <T	.500 <T	1.000 <T	1.000 <T	.500 <T	.500 <T	2.000 <T	2.000 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW				
CONDUCTIVITY (UMHO/CM)			DET'N LIMIT = 1		GUIDELINE = 400 (F2)					
JAN	100	103	160	156	148	150	192	192	399	297
FEB	100	103	211	376	146	145	185	187	394	365
MAR	104	108	340	364	.	.	184	186	386	219
APR	99	52	148	146	146	146	197	199	388	169
MAY	100	103	227	216	150	143	194	198	386	391
JUN	102	107	119	120	132	130	191	190	371	377
JUL	101	103	129	128	.	.	193	193	401	405
AUG	99	101	127	117	128	130	195	201	369	371
SEP	100	103	149	131	131	127	196	176	365	366
OCT	101	104	137	112	129	IRE	203	202	359	359
NOV	98	100	150	126	128	128	203	204	365	362
DEC	99	102	186	144	154	153	202	202	354	350
FLUORIDE (MG/L)			DET'N LIMIT = .01		GUIDELINE = 2.400 (A1)					
JAN	.020 <T	.060	.060	.040 <T	.040 <T	.040 <T	.040 <T	.040 <T	.140	.220
FEB	.020 <T	!!S	.100	.140	.040 <T	.040 <T	.060	.060	.140	!!S
MAR	.030 <T	.040 <T	.140	.140	.	.	.060	.050	.150	.120
APR	.030 <T	.030 <T	.030 <T	.040 <T	.030 <T	.030 <T	.040 <T	.040 <T	.120	.040 <T
MAY	.040 <T	.030 <T	.200	.180	.050	.040 <T	BDL	BDL	BDL	BDL
JUN	.040 <T	.040 <T	.040 <T	.040 <T	.040 <T	.040 <T	.050	.050	.160	.150
JUL	.040 <T	.040 <T	.050	.040 <T	.	.	.050	.050	.130	.130
AUG	.040 <T	.040 <T	.040 <T	.050	.050	.040 <T	.060	.060	.170	.160
SEP	.020 <T	.020 <T	.040 <T	.040 <T	.040 <T	.040 <T	.080	.080	.220	.220

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
OCT	.040 <T	.040 <T	.060	.040 <T	.040 <T	!RE	.060	.060	.160	.160
NOV	.040 <T	.020 <T	.040 <T	.040 <T	.040 <T	.040 <T	.060	.040 <T	.160	.160
DEC	BDL	.040	.060	.040	.040 <T	.040 <T	.040 <T	.040 <T	.160	.160
HARDNESS (MG/L)			DET'N LIMIT = .500		GUIDELINE = 80-100 (A4)					
JAN	47.000	47.000	69.000	67.000	64.000	62.000	80.000	82.000	132.000	85.000
FEB	47.000	!IS	73.000	125.000	63.000	64.000	78.000	78.000	131.000	!IS
MAR	47.000	47.000	110.000	115.000	.	.	77.000	78.000	126.000	75.000
APR	47.000	48.000	64.000	62.000	64.000	65.000	86.000	86.000	126.000	70.000
MAY	45.000	46.000	59.000	61.000	62.000	59.000	75.000	78.000	117.000	114.000
JUN	46.000	47.000	53.000	52.000	58.000	57.000	78.000	80.000	112.000	113.000
JUL	48.000	48.000	56.000	57.000	.	.	86.000	81.000	134.000	134.000
AUG	47.000	47.000	57.000	53.000	56.000	58.000	83.400	71.000	115.000	114.300
SEP	48.000	47.000	61.000	55.000	58.000	58.000	86.000	78.000	118.000	115.000
OCT	53.000	48.000	61.000	54.000	62.000	!RE	88.000	88.000	113.000	111.000
NOV	47.000	48.000	63.000	57.000	57.000	57.000	86.000	82.000	114.000	112.000
DEC	49.000	48.000	79.000	64.000	68.000	67.000	87.000	86.000	110.000	108.000
IONCAL (DMSNLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF
FEB	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF
MAR	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.000 NAF	.000 NAF
APR	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1 STANDING	SITE 1 FREE FLOW	SITE 2 STANDING	SITE 2 FREE FLOW	RAW	TREATED	RAW	TREATED
MAY	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF
JUN	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.000 NAF
JUL	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.000 NAF	.000 NAF
AUG	2.721	3.156	4.458	3.667	5.366	4.246	1.508	4.167	3.718	3.991
SEP	.809	.645	3.361	5.904	2.048	.876	.078	1.352	.717	2.275
OCT	7.405	2.708	2.314	.150	3.255	.000 NAF	1.713	.023	.122	3.448
NOV	1.988	2.152	6.903	4.685	7.116	6.371	4.327	8.126	3.489	2.885
DEC	1.805	1.677	4.745	1.021	1.132	1.778	1.370	1.607	1.382	1.506
LANGELIERS INDEX (DIMENSIONLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.819 NAF	.970 NAF	.670 NAF	.624 NAF	.696 NAF	.647 NAF	.467 NAF	.445 NAF	.366 NAF	.276 NAF
FEB	-.726 NAF	.	-.342 NAF	.326 NAF	-.615 NAF	-.582 NAF	-.423 NAF	-.375 NAF	.438 NAF	.
MAR	.515 NAF	.539 NAF	.197 NAF	.354 NAF	.	.	.312 NAF	.289 NAF	.470 NAF	.028 NAF
APR	.601 NAF	.693 NAF	.536 NAF	.589 NAF	.495 NAF	.451 NAF	.284 NAF	.294 NAF	.474 NAF	.308 NAF
MAY	.534 NAF	.658 NAF	.054 NAF	.026 NAF	.363 NAF	.435 NAF	.208 NAF	.215 NAF	.569 NAF	.536 NAF
JUN	-.617 NAF	-.919 NAF	-.612 NAF	-.652 NAF	-.514 NAF	-.528 NAF	-.297 NAF	-.319 NAF	.458 NAF	.472 NAF
JUL	-.566 NAF	-.632 NAF	-.549 NAF	-.562 NAF	.	.	-.222 NAF	-.251 NAF	.530 NAF	.523 NAF
AUG	-.746	-.677	-.603	-.644	-.521	-.458	-.346	-.203	.440	.477
SEP	-.639	-.776	-.571	-.643	-.593	-.577	-.210	-.299	.432	.467
OCT	-.431	-.565	-.432	-.491	-.384	.	-.148	-.155	.510	.533
NOV	-.547	-.657	-.497	-.623	-.525	-.518	-.276	-.357	.553	.506
DEC	-.613	-.734	-.236	-.515	-.462	-.450	-.298	-.289	.385	.447
MAGNESIUM (MG/L)			DET'N LIMIT = .050		GUIDELINE = 30 (F2)					

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
JAN	2.800	2.800	3.800	3.800	3.400	3.200	4.900	5.100	6.300	3.900
FEB	3.100	IIS	4.200	6.100	3.800	3.800	4.900	4.900	6.200	IIS
MAR	3.000	3.000	5.700	5.800	.	.	5.000	5.100	6.200	4.000
APR	3.100	3.100	4.000	3.900	3.900	3.900	5.500	5.500	6.400	4.000
MAY	2.900	2.800	3.300	3.300	3.600	3.500	4.600	4.900	5.400	5.600
JUN	2.500	2.700	3.000	3.200	3.100	3.100	5.000	4.800	5.100	5.200
JUL	2.800	2.900	3.400	3.400	.	.	5.200	5.200	6.200	6.300
AUG	3.000	3.000	3.400	3.200	3.300	3.300	5.100	5.100	5.400	5.400
SEP	2.500	2.400	3.000	2.400	2.800	2.800	5.200	4.900	5.200	5.200
OCT	3.300	3.000	3.600	3.000	3.300	IRE	5.500	5.500	5.400	5.300
NOV	2.700	2.600	3.400	3.200	2.700	3.000	5.100	5.100	5.100	5.100
DEC	3.000	3.000	3.900	3.900	4.000	3.900	5.500	5.400	5.200	5.000
SODIUM (MG/L)			DET'N LIMIT = .200		GUIDELINE = 200 (C3)					
JAN	1.200	1.200	3.800	3.800	4.000	3.800	3.600	4.000	26.000	29.000
FEB	1.200	IIS	12.000	24.400	2.600	2.400	3.600	3.400	26.000	IIS
MAR	1.200	1.400	21.400	23.600	.	.	3.400	3.800	26.000	12.800
APR	1.200	1.200	2.400	2.200	2.400	2.200	3.600	3.600	24.000	4.400
MAY	1.800	1.800	21.000	18.200	2.800	2.800	3.400	4.000	26.800	26.800
JUN	1.200	1.400	1.800	1.800	2.000	2.000	3.600	3.800	27.000	26.800
JUL	2.800	1.400	2.000	2.000	.	.	4.400	3.600	25.600	25.400
AUG	1.200	1.000	1.800	1.600	2.000	2.000	3.600	3.600	26.600	27.000
SEP	1.400	1.600	4.000	2.200	1.800	1.800	3.200	3.200	26.200	26.600
OCT	2.000	1.200	1.800	1.200	1.800	IRE	3.400	3.600	26.000	25.800

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
NOV	.800 <T	.800 <T	1.400	1.400	1.400	1.400	3.400	3.200	26.000	26.000
DEC	.600 <T	1.200	7.600	2.400	2.600	2.600	3.600	3.600	26.800	27.000
AMMONIUM TOTAL (MG/L)			DET'N LIMIT = 0.002		GUIDELINE = .05 (F2)					
JAN	.012	.208	.234	.042	.020	.024	.018	.136	.102	.216
FEB	.004 <T	!IS	.132	.172	.014	.026	.002 <T	.126	.088	!IS
MAR	.022	.110	.246	.018	.	.	.010	.134	.058	.172
APR	.012	.100	.060	.058	.026	.038	.006 <T	.132	.088	.112
MAY	.008 <T	.142	.086	.054	.026	.048	.002 <T	.144	.090	.096
JUN	.012	.136	.070	.032	.036	.042	.010	.004 <T	.088	.214
JUL	.008 <T	.212	.034	.014	.	.	.004 <T	.002 <T	.088	.082
AUG	.014	.132	.034	.054	.012	.008 <T	.024	.088	.082	.246
SEP	.012	.162	.110	.060	.216	.010	.020	.092	.078	.252
OCT	.024	.220	.042	.026	.026	!RE	.004 <T	.050	.092	.006 <T
NOV	BDL	.154	.028	.054	.002 <T	.002 <T	.002 <T	.046	.064	.226
DEC	.008 <T	.164	.022	.060	.014	.010	.010	.072	.074	.090
NITRITE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = 1.000 (A1)					
JAN	.001 <T	BDL	.039	.015	.001 <T	.003 <T	BDL	BDL	BDL	BDL
FEB	BDL	!IS	.027	.034	.001 <T	.004 <T	BDL	BDL	.001 <T	!IS
MAR	.009	.006	.013	.227	.	.	.005	.013	.046	.017
APR	.001 <T	.001 <T	.030	.016	.004 <T	.005	.001 <T	.001 <T	.006	.002 <T
MAY	.002 <T	.003 <T	.052	.061	.007	.009	.001 <T	.002 <T	.004 <T	.001 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
JUN	.006	.007	.034	.007	.008	.009	.001 <T	BDL	.001 <T	.002 <T
JUL	.003 <T	.001 <T	.031	.012	.	.	.001 <T	BDL	.001 <T	.001 <T
AUG	.003 <T	.006	.038	.026	.008	.005	.004 <T	.002 <T	.004 <T	.006
SEP	.005	.002 <T	.052	.036	.005	.004 <T	.001 <T	.001 <T	.001 <T	.002 <T
OCT	.003 <T	.003 <T	.016	.003 <T	.003 <T	IRE	.003 <T	.003 <T	.003 <T	.004 <T
NOV	.002 <T	.003 <T	.025	.010	.005	.004 <T	.004 <T	.002 <T	.004 <T	.009
DEC	.003 <T	.003 <T	.021	.017	.004 <T	.004 <T	.004 <T	.003 <T	.004 <T	.005
TOTAL NITRATES (MG/L)			DET'N LIMIT = .020		GUIDELINE = 10.000 (A1)					
JAN	.295	.310	.700	.570	.590	.575	.715	.710	BDL	.025 <T
FEB	.290	IIS	.495	.060 <T	.655	.635	.615	.635	BDL	IIS
MAR	.340	.335	.375	.275	.	.	.650	.730	.045 <T	.255
APR	.320	.325	.595	.570	.580	.560	.775	.785	.025 <T	.450
MAY	.335	.340	.235	.305	.575	.540	.670	.680	BDL	BDL
JUN	.300	.320	.500	.460	.485	.475	.635	.630	BDL	BDL
JUL	.280	.285	.515	.435	.	.	.610	.635	BDL	BDL
AUG	.295	.290	.470	.405	.495	.485	.615	.640	BDL	BDL
SEP	.285	.285	.495	.425	.705	.475	.610	.540	BDL	BDL
OCT	.260	.270	.450	.290	.405	IRE	.575	.575	BDL	BDL
NOV	.305	.325	.575	.460	.505	.495	.670	.695	BDL	BDL
DEC	.315	.325	.510	.565	.690	.615	.715	.710	.020 <T	.025 <T
NITROGEN TOT KJELD (MG/L)			DET'N LIMIT = .020		GUIDELINE = N/A					
JAN	.120	.380	.290	.080 <T	.130	.110	.040 <T	.150	.160	.250

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
FEB	.100	!!S	.210	.220	.080 <T	.080 <T	.030 <T	.120	.140	!!S
MAR	.090 <T	.170	.330	.050 <T	.	.	.040 <T	.140	.070 <T	.260
APR	.110	.190	.130	.110	.080	.100	.060 <T	.180	.060 <T	.180
MAY	.080 <T	.200	.120	.080 <T	.070 <T	.100	BDL	.110	.190	.100
JUN	.100	.200	.130	.100	.110	.100	BDL	BDL	.110	.250
JUL	.120	.310	.140	.110	.	.	.070 <T	.050 <T	.160	.150
AUG	.180	.260	.170	.160	.130	.090 <T	.130	.130	.170	.300
SEP	.150	.310	.240	.160	.360	.150	.060 <T	.140	.140	.310
OCT	.070 <T	.230	.060 <T	.050 <T	.050 <T	!RE	BDL	.060 <T	.080 <T	.240
NOV	.110	.250	.100	.140	.100	.120	.040 <T	.090 <T	.150	.250
DEC	.110	.230	.100	.140	.070 <T	.060 <T	.030 <T	.080 <T	.140	.130
PH (DMSNLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)					
JAN	7.740	7.630	7.680	7.740	7.690	7.740	7.800	7.810	8.220	8.290
FEB	7.840	7.760	7.910	8.220	7.800	7.830	7.870	7.910	8.290	!!S
MAR	8.020	8.020	8.170	8.280	.	.	7.990	8.000	8.340	8.170
APR	7.960	7.860	7.870	7.830	7.910	7.940	7.940	7.930	8.340	8.010
MAY	8.050	7.920	8.190	8.220	8.040	8.000	8.080	8.060	8.450	8.430
JUN	7.930	7.700	7.880	7.860	7.920	7.920	7.990	7.960	8.360	8.370
JUL	7.980	7.930	7.920	7.910	.	.	8.020	8.020	8.360	8.360
AUG	7.820	7.900	7.860	7.860	7.940	7.990	7.910	8.050	8.330	8.370
SEP	7.880	7.780	7.820	7.800	7.840	7.850	8.040	8.010	8.310	8.360
OCT	8.080	8.000	7.990	8.000	8.030	!RE	8.090	8.090	8.410	8.440
NOV	8.000	7.900	7.910	7.830	7.910	7.930	7.960	7.900	8.450	8.410

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
DEC	7.920	7.840	7.990	7.890	7.900	7.920	7.930	7.940	8.290	8.360
PHOSPHORUS FIL REACT (MG/L)			DET'N LIMIT = .0005		GUIDELINE = N/A					
JAN	.001 <T	.002 <T	.	.	.	.	.004	.003	.006	.009
FEB	BDL	!!S	.	.	.	.	.002 <T	.002	.004	!!S
MAR	.001 <T	.001 <T	.	.	.	.	.002 <T	.003	.002	.005
APR	.000 <T	.000 <T	.	.	.	.	.002 <T	.003	.004	.002 <T
MAY	.000 <T	.001 <T	.	.	.	.	.002 <T	.003	.004	.006
JUN	.001 <T	.002 <T	.	.	.	.	.003	.003	.006	.007
JUL	BDL	BDL	.	.	.	.	.001 <T	.002	.003	.004
AUG	.000 <T	.000 <T	.	.	.	.	.002 <T	.004	.002 <T	.002
SEP	.001 <T	.001 <T	.	.	.	.	.000 <T	.001 <T	.003	.004
OCT	.004	.004	.	.	.	.	.006	.006	.004	.010
NOV	.001 <T	.001 <T	.	.	.	.	.001 <T	.002 <T	.001 <T	.003
DEC	.000 <T	.000 <T	.	.	.	.	.000 <T	.002 <T	.000 <T	.004
PHOSPHORUS TOTAL (MG/L)			DET'N LIMIT = .002		GUIDELINE = .40 (F2)					
JAN	.002 <T	.011	.	.	.	.	.002 <T	BDL	.005 <T	.007 <T
FEB	.002 <T	!!S	.	.	.	.	BDL	.002 <T	.004 <T	!!S
MAR	BDL	BDL	.	.	.	.	BDL	BDL	.004 <T	.005 <T
APR	.002 <T	.002 <T	.	.	.	.	.003 <T	.003 <T	.015	.003 <T
MAY	.002 <T	.006 <T	.	.	.	.	.003 <T	.003 <T	.007 <T	.005 <T
JUN	.002 <T	.004 <T	.	.	.	.	.002 <T	.003 <T	.006 <T	.005 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
JUL	.003 <T	BDL	.	.	.	.	.003 <T	.002 <T	.005 <T	.005 <T
AUG	BDL	BDL	.	.	.	.	BDL	BDL	BDL	BDL
SEP	.002 <T	.002 <T	.	.	.	.	.006 <T	.008 <T	.009 <T	.011
OCT	.003 <T	.002 <T	.	.	.	.	.002 <T	.002 <T	BDL	.005 <T
NOV	.004 <T	.003 <T	.	.	.	.	.003 <T	.004 <T	.005 <T	.005 <T
DEC	.002 <T	BDL	.	.	.	.	.003 <T	.002 <T	.006 <T	.006 <T
SULPHATE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 500. (A3)					
AUG	3.520	4.630	6.090	5.430	6.050	5.890	10.060	10.040	11.140	11.150
SEP	3.560	5.340	6.970	6.580	6.250	6.200	10.410	9.290	11.550	11.630
OCT	4.520	5.560	6.830	5.850	6.560	!RE	10.600	12.300	11.700	11.600
NOV	3.000	4.000	7.000	6.000	6.000	6.000	11.000	10.500	11.000	11.000
DEC	3.050	4.480	7.420	6.790	6.500	6.500	10.470	10.070	10.590	10.500
TURBIDITY (FTU)			DET'N LIMIT = .02		GUIDELINE = 1.00 (A1)					
JAN	.110	2.900 RRV	.040 <T	.060 <T	.070 <T	.050 <T	BDL	BDL	.030 <T	BDL
FEB	.400	!IS	.150	.190	.190	.180	.150	.120	.150	!IS
MAR	.320	.240	.340	.100 <T	.	.	.180	.100 <T	.600	.160
APR	.230	.050 <T	.080 <T	.100	.250	.150	.060 <T	.210	.320	.090 <T
MAY	.540	1.500	.100	.130	.110	.120	.030 <T	.040 <T	.060 <T	.090 <T
JUN	.470	.290	.350	.200	.310	.140	.220	.170	.170	.070 <T
JUL	.280	.980	.420	.520	.	.	.440	.220	.320	.710
AUG	1.050	1.060	.380	.750	.550	.590	.460	.560	.110	.320

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
SEP	.420	.460	.260	.350	.400	.440	.300	.350	.240 <T	.510
OCT	.560	.300	.340	.200	.230	IRE	.310	.720	.200	.240
NOV	.450	.580	.530	.350	.550	.610	.330	.380	.390	.360
DEC	.610	.360	.320	.460	.310	.420	.420	.200 <T	.320	.110 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
METALS										
SILVER (UG/L)			DET'N LIMIT = .020		GUIDELINE = 50. (A1)					
JAN	BDL	BDL	.040 <T	BDL	IBT	.020 <T	.060 <T	.040 <T	.020 <T	BDL
FEB	BDL	.020 <T	.020 <T	.030 <T	.110 <T	.050 <T	.020 <T	.020 <T	.050 <T	.040 <T
MAR	BDL	.130 <T	.510	.060 <T	.	.	.030 <T	.040 <T	.050 <T	.020 <T
APR	BDL	BDL	.040 <T	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAY	BDL	.030 <T	.030 <T	BDL	.080 <T	BDL	.030 <T	.040 <T	.080 <T	.030 <T
JUN	BDL	BDL	.030 <T	BDL	BDL	.050 <T	BDL	BDL	BDL	BDL
JUL	BDL	BDL	.050 <T	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	.030 <T	.030 <T	BDL	.040 <T	BDL	BDL	.030 <T	BDL	BDL
SEP	.040 <T	BDL	.030 <T	.090 <T	.030 <T	BDL	.090 <T	BDL	.030 <T	.040 <T
OCT	BDL	BDL	BDL	BDL	.040 <T	BDL	BDL	.030 <T	BDL	BDL
NOV	BDL	BDL	.040 <T	BDL	.050 <T	.040 <T	BDL	.120 <T	.040 <T	.040 <T
DEC	BDL	BDL	BDL	BDL	BDL	BDL	BDL	.080 <T	BDL	BDL
ALUMINUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 100.(A4)					
JAN	1.300	1980.000	24.000	37.000	IBT	37.000	2.600	2.600	3.200	4.400
FEB	8.300	250.000	24.000	15.000	37.000	37.000	7.800	7.700	6.800	6.900
MAR	6.100	110.000	13.000	13.000	.	.	2.600	2.700	3.100	24.000
APR	5.300	65.000	29.000	32.000	36.000	34.000	4.700	4.700	4.800	30.000
MAY	11.000	640.000	53.000	61.000	66.000	77.000	2.500	2.500	2.800	3.400
JUN	11.000	180.000	130.000	130.000	98.000	120.000	5.300	5.000	4.500	7.400
JUL	6.200	130.000	83.000	100.000	.	.	3.500	3.000	3.600	4.100
AUG	8.500	170.000	98.000	130.000	77.000	94.000	11.000	11.000	10.240	12.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
SEP	8.000	120.000	93.000	110.000	100.000	100.000	6.900	33.000	6.800	26.000
OCT	11.000	110.000	52.000	79.000	91.000	90.000	3.200	3.400	7.100	8.200
NOV	7.100	130.000	61.000	88.000	76.000	73.000	4.100	4.100	4.200	14.000
DEC	9.300	120.000	74.000	86.000	63.000	60.000	4.800	5.000	4.700	6.300
ARSENIC (UG/L)			DET'N LIMIT = 0.050		GUIDELINE = 50.0 (A1)					
JAN	.090 <T	.730 <T	.680 <T	.480 <T	IBT	.400 <T	.520 <T	.480 <T	2.000	2.000
FEB	.520 <T	.520 <T	.940 <T	2.000	.290 <T	.360 <T	.530 <T	.500 <T	2.300	2.400
MAR	.550 <T	.310 <T	.790 <T	1.500	.	.	.380 <T	.360 <T	1.600	1.300
APR	.490 <T	.200 <T	.400 <T	.140 <T	.210 <T	.150 <T	.230 <T	.210 <T	1.300	.470 <T
MAY	.570 <T	.910 <T	.930 <T	1.600	.300 <T	.300 <T	.260 <T	.250 <T	2.400	1.900
JUN	.520 <T	.470 <T	.440 <T	.490 <T	.300 <T	.500 <T	.420 <T	.480 <T	2.200	2.100
JUL	.250 <T	.170 <T	.490 <T	.420 <T	.	.	.360 <T	.420 <T	2.100	1.900
AUG	.320 <T	.410 <T	.430 <T	.610 <T	.420 <T	.420 <T	.440 <T	.460 <T	2.900	2.200
SEP	.460 <T	.220 <T	.450 <T	.450 <T	.300 <T	.390 <T	.390 <T	.340 <T	2.600	2.300
OCT	.390 <T	.430 <T	.490 <T	.510 <T	.500 <T	.390 <T	.440 <T	.500 <T	3.300	3.000
NOV	.560 <T	.390 <T	.580 <T	.530 <T	.390 <T	.350 <T	.510 <T	.490 <T	2.900	2.900
DEC	.660 <T	.300 <T	.900 <T	.510 <T	.320 <T	.410 <T	.550 <T	.490 <T	2.200	2.700
BARIUM (UG/L)			DET'N LIMIT = 0.020		GUIDELINE = 1000. (A1)					
JAN	7.200	7.200	23.000	20.000	IBT	16.000	30.000	30.000	32.000	34.000
FEB	9.200	9.400	24.000	32.000	17.000	17.000	30.000	31.000	33.000	34.000
MAR	10.000	9.400	36.000	29.000	.	.	31.000	26.000	31.000	22.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW				
APR	9.400	9.200	19.000	18.000	17.000	17.000	31.000	30.000	31.000	20.000
MAY	9.000	9.200	18.000	20.000	17.000	16.000	30.000	30.000	31.000	32.000
JUN	10.000	9.900	17.000	15.000	17.000	15.000	30.000	29.000	31.000	31.000
JUL	9.600	9.800	17.000	15.000	.	.	32.000	30.000	37.000	38.000
AUG	9.700	9.900	17.000	15.000	17.000	15.500	31.000	32.000	33.000	32.000
SEP	9.900	10.000	19.000	17.000	17.000	16.000	34.000	28.000	33.000	33.000
OCT	9.500	9.500	17.000	13.000	16.000	15.000	31.000	33.000	30.000	31.000
NOV	9.700	9.800	20.000	15.000	16.000	15.000	33.000	33.000	31.000	31.000
DEC	10.000	9.900	22.000	19.000	20.000	19.000	33.000	35.000	31.000	31.000
BORON (UG/L)			DET'N LIMIT = 0.200		GUIDELINE = 5000. (A1)					
JAN	6.000 <T	5.600 <T	26.000	22.000	IBT	22.000	20.000	20.000	95.000	190.000
FEB	6.500 <T	6.200 <T	58.000	92.000	11.000 <T	11.000 <T	19.000 <T	19.000 <T	97.000	98.000
MAR	6.200 <T	6.400 <T	70.000	90.000	.	.	16.000 <T	18.000 <T	100.000	63.000
APR	4.900 <T	4.600 <T	10.000 <T	9.100 <T	9.100 <T	8.500 <T	18.000 <T	18.000 <T	92.000	19.000 <T
MAY	5.500 <T	5.900 <T	140.000	120.000	10.000 <T	8.300 <T	18.000 <T	16.000 <T	99.000	100.000
JUN	8.300 <T	6.300 <T	8.500 <T	8.600 <T	10.000 <T	12.000 <T	19.000 <T	18.000 <T	120.000	140.000
JUL	5.200 <T	5.700 <T	10.000 <T	8.700 <T	.	.	17.000 <T	18.000 <T	89.000	96.000
AUG	22.000	6.100 <T	28.000	27.000	16.000 <T	26.000	39.000	18.000 <T	132.000	130.000
SEP	11.000 <T	7.400 <T	33.000	30.000	26.000	9.300 <T	21.000	16.000 <T	160.000	130.000
OCT	17.000 <T	16.000 <T	19.000 <T	18.000 <T	15.000 <T	12.000 <T	28.000	25.000	140.000	140.000
NOV	39.000	27.000	49.000	41.000	37.000	16.000 <T	50.000	23.000	170.000	140.000
DEC	25.000	18.000 <T	65.000	15.000 <T	13.000 <T	12.000 <T	31.000	25.000	140.000	170.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
BERYLLIUM (UG/L)			DET'N LIMIT = 0.010		GUIDELINE = .20 (H)					
JAN	.010 <T	.010 <T	.010 <T	BDL	!BT	BDL	.030 <T	BDL	.010 <T	BDL
FEB	BDL	BDL	BDL	.020 <T	.010 <T	BDL	BDL	BDL	.020 <T	.030 <T
MAR	.010 <T	.020 <T	.040 <T	.030 <T	.	.	.010 <T	BDL	.050 <T	.030 <T
APR	.020 <T	BDL	BDL	BDL	.030 <T	BDL	BDL	BDL	BDL	.030 <T
MAY	BDL	BDL	.040 <T	BDL	BDL	BDL	.020 <T	.020 <T	BDL	.020 <T
JUN	BDL	BDL	BDL	BDL	BDL	.030 <T	.020 <T	BDL	.020 <T	BDL
JUL	BDL	BDL	BDL	.020 <T	.	.	BDL	BDL	.020 <T	BDL
AUG	.030 <T	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SEP	.040 <T	.020 <T	.050 <T	.070 <T	.040 <T	.070 <T	.070 <T	.030 <T	.080 <T	.030 <T
OCT	.050 <T	.040 <T	.080 <T	.030 <T	.060 <T	.080 <T	.070 <T	.060 <T	.150 <T	.020 <T
NOV	.130 <T	.070 <T	.150 <T	.110 <T	.120 <T	BDL	BDL	BDL	.060 <T	.070 <T
DEC	BDL	.060 <T	.040 <T	.030 <T	.020 <T	BDL	.040 <T	.020 <T	.020 <T	.060 <T
CADMIUM (UG/L)			DET'N LIMIT = 0.050		GUIDELINE = 5.000 (A1)					
JAN	BDL	.070 <T	BDL	.050 <T	!BT	BDL	BDL	BDL	BDL	BDL
FEB	BDL	BDL	BDL	BDL	.360 <T	.180 <T	BDL	BDL	BDL	BDL
MAR	BDL	BDL	.080 <T	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	BDL	BDL	.280 <T	BDL	BDL	BDL	.060 <T	BDL
MAY	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	BDL	BDL	.080 <T	BDL	BDL	BDL	BDL	BDL
JUL	BDL	BDL	BDL	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.090 <T	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.100 <T	BDL	BDL	BDL	BDL	BDL	BDL	.090 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
OCT	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	BDL	BDL	.210 <T	BDL	BDL	BDL	.070 <T	BDL
DEC	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
COBALT (UG/L)			DET'N LIMIT = 0.020		GUIDELINE = 1000 (H)					
JAN	.230 <T	.180 <T	.260 <T	.220 <T	!BT	.170 <T	.220 <T	.220 <T	.320 <T	.240 <T
FEB	.130 <T	.050 <T	.080 <T	.080 <T	.060 <T	.060 <T	.060 <T	.050 <T	.050 <T	.060 <T
MAR	.090 <T	.070 <T	1.000	.090 <T	.	.	.120 <T	.080 <T	.050 <T	.100 <T
APR	.050 <T	.030 <T	.080 <T	BDL	.040 <T	.040 <T	BDL	.030 <T	BDL	.060 <T
MAY	.060 <T	.070 <T	.080 <T	.050 <T	.060 <T	.050 <T	.080 <T	.050 <T	.070 <T	.040 <T
JUN	.070 <T	.070 <T	.070 <T	.060 <T	.060 <T	.050 <T	.050 <T	.070 <T	.090 <T	.070 <T
JUL	BDL	BDL	.030 <T	BDL	.	.	BDL	.030 <T	.060 <T	.030 <T
AUG	.050 <T	.060 <T	.070 <T	.070 <T	.120 <T	.080 <T	.050 <T	.060 <T	.100 <T	.060 <T
SEP	.080 <T	.110 <T	.070 <T	.080 <T	.070 <T	.070 <T	.080 <T	.080 <T	.100 <T	.090 <T
OCT	.100 <T	.080 <T	.190 <T	.100 <T	.120 <T	.120 <T	.080 <T	.050 <T	.100 <T	.180 <T
NOV	.040 <T	.040 <T	.090 <T	.080 <T	.110 <T	.040 <T	.050 <T	.040 <T	.100 <T	.120 <T
DEC	.070 <T	.100 <T	.120 <T	.110 <T	.450 <T	.130 <T	.120 <T	.100 <T	.130 <T	.110 <T
CHROMIUM (UG/L)			DET'N LIMIT = 0.100		GUIDELINE = 50. (A1)					
JAN	.190 <T	.350 <T	.840 <T	.790 <T	!BT	.590 <T	2.900	1.600	BDL	BDL
FEB	.170 <T	.430 <T	.420 <T	.110 <T	.650 <T	.690 <T	1.400	1.400	1.100	.390 <T
MAR	.160 <T	.260 <T	.220 <T	.160 <T	.	.	2.100	2.500	.740 <T	.330 <T
APR	.770 <T	.830 <T	.740 <T	.690 <T	.690 <T	.730 <T	3.200	1.300	1.800	6.800

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
MAY	.260 <T	.560 <T	BDL	BDL	.280 <T	.230 <T	2.900	1.700	1.300	BDL
JUN	.220 <T	.200 <T	.340 <T	.450 <T	.420 <T	.550 <T	1.300	1.300	BDL	.140 <T
JUL	BDL	.130 <T	.380 <T	.390 <T	.	.	1.200	1.200	BDL	BDL
AUG	1.300	.360 <T	1.800	1.600	.700 <T	1.600	2.700	1.400	2.400	.130 <T
SEP	.470 <T	.190 <T	1.600	2.400	2.100	.370 <T	1.300	1.100	3.300	BDL
OCT	2.500	2.800	2.300	2.800	2.100	1.900	4.300	3.700	5.100	5.100
NOV	3.400	2.200	4.300	3.600	3.500	.960 <T	4.500	1.400	5.300	1.600
DEC	2.000	1.400	2.500	.730 <T	.560 <T	.530 <T	2.000	1.800	.160 <T	3.500
COPPER (UG/L)			DET'N LIMIT = .100		GUIDELINE = 1000 (A3)					
JAN	9.800	21.000	93.000	16.000	!BT	59.000	2.800	3.400	.890 <T	4.100
FEB	5.600	41.000	98.000	20.000	160.000	59.000	2.900	3.000	1.300	2.600
MAR	4.900	7.200	130.000	11.000	.	.	2.400	2.000	.530 <T	3.300
APR	5.000	7.200	120.000	15.000	140.000	59.000	3.700	3.500	1.400	6.700
MAY	3.700	130.000	200.000	25.000	140.000	60.000	3.100	1.900	1.300	4.600
JUN	4.000	8.200	200.000	24.000	180.000	42.000	1.400	1.700	1.700	6.100
JUL	3.100	6.600	220.000	27.000	.	.	2.500	10.000	1.300	5.400
AUG	3.600	6.000	180.000	27.000	250.000	72.000	7.100	2.600	1.100	6.300
SEP	3.900	5.900	170.000	26.000	90.000	60.000	1.400	1.800	.910 <T	6.700
OCT	3.700	5.100	190.000	27.000	77.000	34.000	2.200	2.300	17.000	17.000
NOV	4.100	4.600	190.000	20.000	130.000	30.000	1.900	2.200	1.400	18.000
DEC	3.800	4.800	150.000	16.000	120.000	31.000	3.800	3.200	.550 <T	7.800
IRON (UG/L)			DET'N LIMIT = 4.000		GUIDELINE = 300. (A3)					

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
JAN	4.800 <T	11.000 <T	19.000 <T	34.000 <T	!BT	46.000	BDL	BDL	14.000 <T	6.700 <T
FEB	13.000 <T	23.000 <T	25.000 <T	12.000 <T	26.000 <T	37.000 <T	BDL	BDL	4.200 <T	4.200 <T
MAR	19.000 <T	8.000 <T	12.000 <T	17.000 <T	.	.	4.200 <T	BDL	9.800 <T	11.000 <T
APR	24.000 <T	19.000 <T	28.000 <T	31.000 <T	40.000 <T	31.000 <T	7.300 <T	7.600 <T	24.000 <T	13.000 <T
MAY	15.000 <T	72.000	20.000 <T	25.000 <T	27.000 <T	31.000 <T	9.100 <T	13.000 <T	5.700 <T	7.700 <T
JUN	21.000 <T	12.000 <T	31.000 <T	23.000 <T	24.000 <T	29.000 <T	BDL	BDL	BDL	6.400 <T
JUL	7.200 <T	BDL	13.000 <T	16.000 <T	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	8.200 <T	BDL	74.000	62.000	BDL	BDL	BDL	BDL
SEP	8.500 <T	BDL	17.000 <T	6.400 <T	23.000 <T	24.000 <T	BDL	BDL	BDL	7.100 <T
OCT	11.000 <T	BDL	8.600 <T	BDL	22.000 <T	23.000 <T	BDL	BDL	BDL	BDL
NOV	11.000 <T	6.300 <T	12.000 <T	12.000 <T	22.000 <T	26.000 <T	BDL	BDL	BDL	BDL
DEC	BDL	BDL	19.000 <T	6.700 <T	30.000 <T	33.000 <T	BDL	BDL	BDL	BDL
MERCURY (UG/L)			DET'N LIMIT = 0.010		GUIDELINE = 1.000 (A1)					
JAN	.020	.050	.	.010	.	.030	.170	.020	.020	.020
FEB	.020	.020	.	.020	.	.030	.020	.020	.020	.020
MAR	.020	.030	.	.020	.	.	.020	.030	.020	.020
APR	.030	.030	.	.020	.	.040	.040	.040	.060	.060
MAY	.050 <T	.050 <T	.	.030 <T	.	.040 <T	.050 <T	.050 <T	.060	.050 <T
JUN	.100	.080	.	.030 <T	.	.040 <T	.100	.070	.090	.130
JUL	.040 <T	.050 <T	.	.060	.	.	.040 <T	.050 <T	.050 <T	.050 <T
AUG	BDL	BDL	.	BDL	.	.050 <T	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	.040 <T	.	.070	.020 <T	BDL	BDL	BDL
OCT	BDL	BDL	.	.090	.	.100	BDL	BDL	BDL	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
NOV	.020 <T	BDL	.	.090	.	.060	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	.090	.	.050 <T	BDL	BDL	BDL	BDL
MANGANESE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 50.0 (A3)					
JAN	.090 <T	.140 <T	9.800	4.800	!BT	2.000	.110 <T	.080 <T	20.000	13.000
FEB	.990	1.300	4.000	14.000	1.500	1.700	.120 <T	.110 <T	18.000	19.000
MAR	1.200	.360 <T	8.100	13.000	.	.	.120 <T	.100 <T	17.000	8.500
APR	1.000	.290 <T	2.800	1.700	1.300	1.100	.100 <T	.090 <T	20.000	4.900
MAY	1.300	3.400	3.400	4.500	1.700	2.100	.150 <T	.120 <T	20.000	19.000
JUN	2.100	.480 <T	4.100	1.800	1.300	1.500	.110 <T	.100 <T	18.000	17.000
JUL	.590	.140 <T	6.100	2.100	.	.	.070 <T	BDL	21.000	20.000
AUG	.710	.330 <T	1.300	.940	4.600	3.700	.120 <T	.130 <T	17.000	16.000
SEP	.700	.170 <T	1.300	1.000	1.700	1.500	.080 <T	.210 <T	17.000	17.000
OCT	1.300	.150 <T	1.500	.740	1.100	1.200	.110 <T	.160 <T	16.000	16.000
NOV	.640	.200 <T	1.900	1.000	1.400	1.500	BDL	.100 <T	18.000	16.000
DEC	1.000	.170 <T	2.500	1.300	1.800	1.900	.110 <T	BDL	16.000	16.000
MOLYBDENUM (UG/L)			DET'N LIMIT = 0.020		GUIDELINE = 500 (H)					
JAN	.200 <T	.130 <T	.440 <T	.410 <T	!BT	.520	.420 <T	.430 <T	1.900	4.200
FEB	.130 <T	.140 <T	1.400	2.000	.240 <T	.220 <T	.470 <T	.440 <T	2.100	2.200
MAR	.140 <T	.160 <T	2.200	2.000	.	.	.470 <T	.490 <T	2.100	1.600
APR	.120 <T	.110 <T	.210 <T	.230 <T	.190 <T	.190 <T	.430 <T	.430 <T	1.900	.370 <T
MAY	.120 <T	.120 <T	3.500	3.000	.250 <T	.200 <T	.530	.530	2.500	2.500

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
JUN	.140 <T	.130 <T	.200 <T	.220 <T	.250 <T	.180 <T	.460 <T	.450 <T	2.600	2.500
JUL	.140 <T	.120 <T	.240 <T	.220 <T	.	.	.510	.480 <T	2.400	2.300
AUG	.110 <T	.070 <T	.210 <T	.160 <T	.180 <T	.170 <T	.450 <T	.410 <T	3.000	2.900
SEP	.130 <T	.100 <T	.420 <T	.230 <T	.170 <T	.210 <T	.430 <T	.340 <T	2.500	2.600
OCT	.140 <T	.090 <T	.170 <T	.120 <T	.170 <T	.140 <T	.310 <T	.370 <T	2.700	3.000
NOV	.140 <T	.110 <T	.260 <T	.190 <T	.190 <T	.150 <T	.420 <T	.430 <T	2.400	2.400
DEC	.150 <T	.170 <T	.810	.290 <T	.230 <T	.240 <T	.480 <T	.490 <T	2.900	2.900
NICKEL (UG/L)			DET'N LIMIT = 0.100		GUIDELINE = 50. (F3)					
JAN	1.100 <T	.810 <T	6.100	1.700	!BT	1.600	2.100	2.000	3.500	2.100
FEB	.120 <T	BDL	.280 <T	BDL	5.700	BDL	BDL	BDL	BDL	BDL
MAR	.310 <T	.290 <T	420.000	BDL	.	.	.150 <T	.140 <T	BDL	.540 <T
APR	.120 <T	BDL	.820 <T	BDL	1.500	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.890 <T	BDL	4.500	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	1.500 <T	BDL	5.400	.380 <T	BDL	BDL	BDL	BDL
JUL	BDL	BDL	2.400	.200 <T	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	5.500	BDL	6.800	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	3.800	BDL	1.100 <T	BDL	BDL	BDL	BDL	BDL
OCT	.330 <T	.200 <T	11.000	BDL	5.200	BDL	BDL	BDL	BDL	BDL
NOV	1.400 <T	BDL	2.400	BDL	7.000	BDL	BDL	BDL	BDL	BDL
DEC	.130 <T	.260 <T	1.500 <T	BDL	190.000	.530 <T	BDL	BDL	BDL	BDL
LEAD (UG/L)			DET'N LIMIT = 0.050		GUIDELINE = 50. (A1)					
JAN	.030 <T	.200	1.300	.180 <T	!BT	1.800	.200	.360	.190 <T	.130 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
FEB	.090 <T	.160 <T	1.500	.310	12.000	12.000	.040 <T	.270	.200	.150 <T
MAR	.170 <T	.090 <T	8.700	.490	.	.	.080 <T	.200	.230	.170 <T
APR	.130 <T	.030 <T	1.800	.170 <T	12.000	3.700	.070 <T	.490	.170 <T	.160 <T
MAY	.040 <T	.890	9.300	.680	6.500	1.900	.100 <T	.330	.200 <T	.210
JUN	.140 <T	.070 <T	13.000	.840	9.900	1.600	.070 <T	.100 <T	.070 <T	.190 <T
JUL	.030 <T	BDL	13.000	.730	.	.	BDL	1.000	.030 <T	.250
AUG	.110 <T	.080 <T	29.000	1.100	13.000	2.200	.050 <T	.170 <T	.260	.150 <T
SEP	.110 <T	.050 <T	25.000	1.300	5.200	2.100	.050 <T	.100 <T	.300	.470
OCT	.200 <T	.060 <T	22.000	1.400	4.700	1.700	BDL	.070 <T	.130 <T	.170 <T
NOV	.170 <T	.050 <T	15.000	.800	12.000	1.200	.080 <T	.140 <T	.140 <T	.150 <T
DEC	.140 <T	.060 <T	19.000	.960	5.900	1.000	.050 <T	.290	.070 <T	.100 <T
ANTIMONY (UG/L)			DET'N LIMIT = .050		GUIDELINE = 146. (D4)					
JAN	.140 <T	.110 <T	.100 <T	.060 <T	!BT	.060 <T	.040 <T	.030 <T	.030 <T	.040 <T
FEB	.060 <T	.060 <T	.070 <T	.020 <T	.110 <T	.090 <T	.030 <T	.020 <T	.030 <T	.030 <T
MAR	.070 <T	.090 <T	.400	.040 <T	.	.	BDL	.020 <T	.020 <T	.040 <T
APR	.070 <T	.040 <T	.140 <T	.030 <T	.070 <T	.030 <T	BDL	BDL	BDL	BDL
MAY	.070 <T	.060 <T	.130 <T	BDL	.060 <T	.040 <T	.050 <T	BDL	.050 <T	.030 <T
JUN	.060 <T	.070 <T	.180 <T	.060 <T	.090 <T	.070 <T	.030 <T	BDL	BDL	BDL
JUL	.060 <T	.060 <T	.220	.040 <T	.	.	BDL	BDL	.030 <T	BDL
AUG	.590	.540	.810	.630	.610	.580	.530	.360	.500	.480
SEP	.400	.660	.410	.520	.420	.540	.390	.320	.360	.460
OCT	.440	.380	.530	.410	.490	.500	.400	.390	.210	.390
NOV	.420	.430	.570	.450	.540	.420	.390	.430	.460	.530

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
DEC	.270	.250	.240	.310	.300	.300	.270	.270	.220	.280
SELENIUM (UG/L)			DET'N LIMIT = 0.200		GUIDELINE = 10. (A1)					
JAN	.690 <T	.550 <T	.550 <T	.460 <T	!BT	.710 <T	1.400 <T	1.400 <T	2.000 <T	1.500 <T
FEB	.210 <T	.260 <T	.980 <T	2.100 <T	.720 <T	.570 <T	.640 <T	.570 <T	2.200 <T	2.500 <T
MAR	BDL	.230 <T	2.300 <T	1.800 <T	.	.	BDL	.520 <T	1.900 <T	1.100 <T
APR	.250 <T	BDL	BDL	BDL	.220 <T	.990 <T	.250 <T	.520 <T	2.800 <T	.990 <T
MAY	.700 <T	.460 <T	1.500 <T	.920 <T	.330 <T	.330 <T	.490 <T	BDL	1.800 <T	2.700 <T
JUN	1.000 <T	.420 <T	BDL	.710 <T	.710 <T	.760 <T	.380 <T	BDL	.810 <T	2.300 <T
JUL	BDL	.480 <T	.980 <T	BDL	.	.	1.400 <T	1.800 <T	3.100 <T	2.300 <T
AUG	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	.340 <T	BDL
SEP	BDL	BDL	BDL	1.000 <T	BDL	BDL	BDL	BDL	1.300 <T	2.500 <T
OCT	BDL	1.500 <T	BDL	1.500 <T	2.000 <T	1.200 <T	.960 <T	.580 <T	5.200 <T	7.000 <T
NOV	BDL	BDL	BDL	BDL	1.600 <T	1.200 <T	1.100 <T	.400 <T	3.600 <T	4.700 <T
DEC	.360 <T	BDL	.490 <T	BDL	BDL	BDL	.220 <T	BDL	1.800 <T	2.100 <T
STRONTIUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 2000.(H)					
JAN	30.000	31.000	82.000	71.000	!BT	52.000	79.000	79.000	410.000	220.000
FEB	23.000	24.000	110.000	350.000	49.000	47.000	76.000	74.000	400.000	420.000
MAR	28.000	27.000	290.000	330.000	.	.	81.000	76.000	400.000	180.000
APR	26.000	24.000	51.000	48.000	46.000	46.000	75.000	73.000	380.000	82.000
MAY	24.000	25.000	91.000	98.000	46.000	45.000	80.000	81.000	440.000	420.000
JUN	28.000	26.000	41.000	38.000	44.000	38.000	73.000	71.000	370.000	350.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
JUL	25.000	25.000	42.000	41.000	.	.	77.000	74.000	440.000	410.000
AUG	26.000	24.000	40.000	36.000	40.000	39.000	77.000	73.000	380.000	350.000
SEP	26.000	26.000	62.000	51.000	41.000	41.000	80.000	67.000	390.000	390.000
OCT	23.000	21.000	39.000	32.000	39.000	38.000	76.000	74.000	340.000	350.000
NOV	24.000	23.000	51.000	40.000	40.000	39.000	80.000	82.000	380.000	360.000
DEC	24.000	24.000	130.000	59.000	51.000	50.000	80.000	80.000	350.000	340.000
TITANIUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = N/A					
JAN	2.200	2.400	6.700	6.100	IBT	5.100	11.000	10.000	8.700	8.600
FEB	3.200	3.500	6.900	9.100	6.300	6.300	10.000	11.000	9.600	9.900
MAR	3.200	3.100	8.600	11.000	.	.	12.000	13.000	11.000	7.400
APR	5.200	5.000	13.000	13.000	13.000	12.000	22.000	22.000	19.000	13.000
MAY	4.500	6.400	8.500	8.300	7.200	6.100	9.900	9.800	8.600	8.600
JUN	2.500	2.200	3.100	3.400	4.300	4.500	8.500	8.600	6.800	7.100
JUL	2.000 <T	1.800 <T	4.100	3.500	.	.	7.800	8.600	6.800	6.900
AUG	4.800	5.000	7.200	5.700	6.700	7.400	13.000	13.000	13.800	14.000
SEP	3.700	3.400	6.300	5.800	5.900	5.400	13.000	10.000	12.000	12.000
OCT	3.000	3.000	5.300	3.500	4.600	4.200	12.000	13.000	10.000	11.000
NOV	3.700	3.800	9.300	6.600	6.800	6.600	16.000	16.000	14.000	13.000
DEC	2.700	2.400	5.400	4.600	5.600	5.400	8.800	8.700	8.000	8.100
THALLIUM (UG/L)			DET'N LIMIT = .010		GUIDELINE = 13. (D4)					
JAN	.030 <T	.030 <T	.010 <T	.020 <T	IBT	.010 <T	.020 <T	.020 <T	.020 <T	.020 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
FEB	.010 <T	BDL	BDL	BDL	.020 <T	BDL	BDL	BDL	BDL	BDL
MAR	BDL	BDL	BDL	.010 <T	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
JUN	.030 <T	.020 <T	.020 <T	BDL	.020 <T	BDL	BDL	BDL	BDL	BDL
JUL	BDL	BDL	BDL	BDL	.	.	BDL	.020 <T	BDL	BDL
AUG	BDL	BDL	.020 <T	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	BDL	BDL	BDL	BDL	BDL	.020 <T	BDL	BDL
OCT	BDL	.020 <T	.030 <T	BDL	.020 <T	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.020 <T	BDL	.020 <T	BDL	BDL	.020 <T	BDL	.020 <T
DEC	BDL	BDL	BDL	BDL	BDL	BDL	BDL	.030 <T	.020 <T	BDL
URANIUM (UG/L)			DET'N LIMIT = .020		GUIDELINE = 20. (A2)					
JAN	.080 <T	.120 <T	.720	.710	!BT	.720	1.400	1.300	6.100	6.800
FEB	.060 <T	.060 <T	2.200	6.600	.520	.460	1.200	1.200	7.200	7.200
MAR	.050 <T	.090 <T	4.000	5.600	.	.	1.000	1.000	6.200	2.700
APR	.030 <T	BDL	.510	.470	.420	.440	1.500	1.400	6.600	.990
MAY	.050 <T	.100 <T	3.500	3.700	.420	.390	1.100	1.100	6.400	6.500
JUN	.050 <T	.070 <T	.250	.230	.300	.340	1.100	1.000	7.000	7.200
JUL	.070 <T	.030 <T	.330	.280	.	.	1.000	1.000	6.900	7.400
AUG	.050 <T	.080 <T	.310	.190 <T	.220	.290	.990	.980	7.100	7.500
SEP	.070 <T	.060 <T	.570	.470	.270	.260	1.100	.760	6.700	6.900
OCT	.050 <T	.040 <T	.330	.130 <T	.230	.230	.920	1.000	6.400	6.600
NOV	.050 <T	.060 <T	.500	.340	.340	.310	1.300	1.300	6.800	6.600

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
DEC	.040 <T	.030 <T	1.700	.480	.440	.450	1.200	1.300	6.300	6.300
VANADIUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 100 (H)					
JAN	.230 <T	.760	.580	.930	IBT	.940	2.800	2.700	.490	.340 <T
FEB	.230 <T	.390 <T	.590	.250 <T	1.000	.970	2.500	2.500	.080 <T	.100 <T
MAR	.240 <T	.360 <T	.350 <T	.400	.	.	2.300	2.500	.130 <T	.370 <T
APR	.230 <T	.300 <T	.910	.990	1.100	.980	2.500	2.400	.030 <T	.760
MAY	.230 <T	.520	1.100	.680	.910	.890	2.500	2.400	.070 <T	.060 <T
JUN	.220 <T	.300 <T	.790	.730	.860	.890	2.500	2.500	.070 <T	.100 <T
JUL	.220 <T	.350 <T	.760	.790	.	.	2.500	2.600	.150 <T	.180 <T
AUG	.250 <T	.310 <T	.800	.740	.830	.890	2.500	2.500	.130 <T	.100 <T
SEP	.210 <T	.350 <T	.780	.840	.790	.820	2.700	2.200	.110 <T	.140 <T
OCT	.280 <T	.440 <T	.660	.750	.860	.870	2.600	2.500	.130 <T	.200 <T
NOV	.260 <T	.380 <T	.750	.840	.900	.810	2.600	2.600	.180 <T	.240 <T
DEC	.280 <T	.460 <T	.930	1.100	1.200	1.100	2.600	2.700	.170 <T	.230 <T
ZINC (UG/L)			DET'N LIMIT = .001		GUIDELINE = 5.00 (A3)					
JAN	.250 <T	.260 <T	20.000	2.300	IBT	3.400	.830 <T	2.900	1.200	.820 <T
FEB	1.500	.880 <T	16.000	1.600	14.000	3.200	.590 <T	2.700	.510 <T	.760 <T
MAR	1.800	.470 <T	130.000	2.000	.	.	.950 <T	2.100	1.200	1.200
APR	1.600	.560 <T	12.000	1.400	12.000	4.100	.960 <T	3.100	3.900	1.800
MAY	1.000 <T	2.100	27.000	3.400	12.000	3.000	.850 <T	1.500	2.100	1.500
JUN	1.700	.600 <T	26.000	3.900	18.000	2.800	.770 <T	.450 <T	2.000	1.400

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
JUL	.620 <T	.310 <T	35.000	3.300	.	.	1.200	2.600	1.300	1.600
AUG	1.100	.490 <T	32.000	2.600	28.000	2.700	.580 <T	.630 <T	1.300	.770 <T
SEP	1.300	.620 <T	21.000	2.800	11.000	4.800	.740 <T	.630 <T	1.300	3.000
OCT	1.100	.250 <T	52.000	2.600	10.000	2.500	.260 <T	BDL	.540 <T	.540 <T
NOV	.950 <T	.270 <T	29.000	2.500	17.000	2.700	.530 <T	.490 <T	2.400	.830 <T
DEC	1.100	.330 <T	19.000	2.300	16.000	2.700	.680 <T	1.200	.390 <T	.330 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1 STANDING	SITE 1 FREE FLOW	SITE 2 STANDING	SITE 2 FREE FLOW	RAW	TREATED	RAW	TREATED
PESTICIDES & PCB										
ALPHA BHC (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 700 (G)					
JAN	3.000 <T	4.000 <T	.	2.000 <T	.	3.000 <T	BDL	BDL	BDL	BDL
FEB	4.000 <T	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	!LA	5.000 <T	.	BDL	.	.	BDL	BDL	BDL	2.000 <T
APR	4.000 <T	4.000 <T	.	2.000 <T	.	3.000 <T	BDL	BDL	BDL	BDL
MAY	3.000 <T	3.000 <T	.	1.000 <T	.	2.000 <T	BDL	BDL	BDL	BDL
JUN	3.000 <T	3.000 <T	.	4.000 <T	.	5.000 <T	BDL	BDL	BDL	BDL
JUL	2.000 <T	7.000 <T	.	6.000 <T	.	.	BDL	!LA	BDL	BDL
AUG	4.000 <T	3.000 <T	.	4.000 <T	.	3.000 <T	BDL	BDL	BDL	BDL
SEP	4.000 <T	6.000 <T	.	4.000 <T	.	4.000 <T	BDL	!LA	BDL	BDL
OCT	2.000 <T	BDL	.	2.000 <T	.	2.000 <T	BDL	BDL	BDL	BDL
NOV	3.000 <T	5.000 <T	.	2.000 <T	.	3.000 <T	BDL	BDL	BDL	BDL
DEC	5.000 <T	5.000 <T	.	2.000 <T	.	2.000 <T	BDL	BDL	BDL	BDL
LINDANE (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 4000 (A1)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
FEB	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	!LA	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	1.000 <T	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	1.000 <T	BDL	2.000 <T	BDL	BDL
JUL	BDL	1.000 <T	.	1.000 <T	.	.	BDL	!LA	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
SEP	1.000 <T	1.000 <T	.	BDL	.	BDL	BDL	!LA	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
ETHLYENE DIBROMIDE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 50.0 (G)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	.050 <T
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
PHENOLICS										
PHENOLICS (UG/L)			DET'N LIMIT = 0.2		GUIDELINE = 2.00 (A3)					
JAN	.800 <T	.600 <T	.	.	.	.	.800 <T	BDL	.600 <T	.600 <T
FEB	BDL	BDL	.	.	.	.	.600 <T	BDL	BDL	BDL
MAR	BDL	BDL	.	.	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	.	.	.	BDL	BDL	BDL	BDL
MAY	.600 <T	BDL	.	.	.	.	BDL	.200 <T	BDL	BDL
JUN	.800 <T	.800 <T	.	.	.	.	!RE	.200 <T	.400 <T	.400 <T
JUL	BDL	BDL	.	.	.	.	BDL	BDL	BDL	BDL
AUG	1.400	1.200	.	.	.	.	.200 <T	BDL	1.800	1.200
SEP	.200 <T	BDL	.	.	.	.	.	.	BDL	BDL
OCT	.400 <T	.400 <T	.	.	.	.	BDL	BDL	BDL	BDL
NOV	BDL	.200 <T	.	.	.	.	BDL	BDL	BDL	BDL
DEC	.600 <T	.600 <T	.	.	.	.	.800	.600 <T	.600 <T	.800

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
VOLATILES										
TOLUENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 24.0 (84)					
JAN	BDL	.050 UCS	.	BDL	.	.100 UCS	.100 UCS	BDL	.100 UCS	.200 UCS
MAR	BDL	.100 UCS	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	.050 UCS	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	.200 UCS	BDL	.150 UCS	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	.050 <T	.	BDL	.	.	.050 <T	.100 <T	.100 <T	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	.100 <T	BDL	BDL	BDL	BDL
DEC	BDL	.050 <T	.	BDL	.	BDL	BDL	BDL	BDL	BDL
ETHYLBENZENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 2.4 (84)					
JAN	BDL	.050 <T	.	BDL	.	.050 <T	BDL	.050 <T	BDL	.050 <T
MAR	BDL	BDL	.	BDL	.	.	BDL	.050 <T	BDL	BDL
APR	BDL	.050 <T	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	.050 <T	.100 <T	.	BDL	.	BDL	.100 <T	.050 <T	.100 <T	BDL
JUN	BDL	.100 <T	.	.050 <T	.	.100 <T	.050 <T	.100 <T	.	.100 <T
JUL	.300 <T	.150 <T	.	BDL	.	.	.050 <T	.100 <T	.150 <T	.100 <T
AUG	BDL	.100 <T	.	BDL	.	BDL	.300 <T	.100 <T	.250 <T	.100 <T
SEP	BDL	.050 <T	.	BDL	.	BDL	.050 <T	.050 <T	.050 <T	.050 <T
OCT	BDL	BDL	.	BDL	.	.100 <T	.050 <T	.100 <T	.100 <T	.100 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
NOV	BDL	BDL	.	BDL	.	BDL	BDL	.050 <T	.050 <T	.050 <T
DEC	.100 <T	.050 <T	.	BDL	.	BDL	BDL	.100 <T	BDL	.050 <T
P-XYLENE (UG/L)			DET'N LIMIT = .100		GUIDELINE = 300 (B4)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	.100 <T
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	.100	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
M-XYLENE (UG/L)			DET'N LIMIT = .100		GUIDELINE = 300 (B4)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	.100 RMP
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	.100 <T	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	.200 <T	.	BDL	.	.	BDL	.100 <T	BDL	.100 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW				
AUG	BDL	BDL	.	BDL	.	BDL	.300 <T	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	.100 <T	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
O-XYLENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 300 (B4)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	.050 <T
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
STYRENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 46.5 (D2)					
OCT	.450 <T	.400 <T	.	.150 <T	.	.450 <T	.400 <T	.400 <T	.650 UCS	.450 <T
NOV	.300 <T	.150 <T	.	.150 <T	.	.200 <T	.450 <T	.250 <T	.450 <T	.400 <T
DEC	.650 UCS	.300 <T	.	.100 <T	.	.200 <T	BDL	.350 <T	BDL	.050 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
METHYLENE CHLORIDE (UG/L)			DET'N LIMIT = .500		GUIDELINE = 1750 (D3)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	2.000 UCS	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
CHLOROFORM (UG/L)			DET'N LIMIT = .100		GUIDELINE = 350 (A1+)					
JAN	BDL	12.000	.	5.000	.	6.000	BDL	BDL	BDL	BDL
MAR	BDL	6.900	.	.700 <T	.	.	BDL	.100 <T	BDL	3.200
APR	BDL	9.200	.	5.300	.	4.900	BDL	.200 <T	BDL	5.100
MAY	BDL	11.100	.	2.900	.	7.500	BDL	.200 <T	.200 <T	.500 <T
JUN	BDL	10.900	.	9.300	.	10.200	BDL	1.200	.	BDL
JUL	BDL	11.700	.	8.000	.	.	BDL	1.200	BDL	.300 <T
AUG	.200 <T	13.900	.	14.100	.	10.600	.100 <T	.200 <T	.300 <T	.200 <T
SEP	BDL	13.100	.	11.200	.	8.800	.300 <T	3.500	BDL	.200 <T
OCT	.300 <T	15.000	.	18.600	.	9.700	.200 <T	.100 <T	.100 <T	.300 <T
NOV	BDL	11.600	.	8.800	.	9.200	.100 <T	.100 <T	BDL	.100 <T

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1		SITE 2		RAW	TREATED	RAW	TREATED
			STANDING	FREE FLOW	STANDING	FREE FLOW				
DEC	BDL	12.200	.	7.800	.	6.900	BDL	BDL	BDL	.100 <T
111, TRICHLOROETHANE (UG/L)			DET'N LIMIT = .020		GUIDELINE = 200 (D1)					
JAN	.100 <T	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	.200 <T	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	.100 <T	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 350 (A1+)					
JAN	BDL	2.600	.	1.200	.	1.600	BDL	.050 APS	BDL	BDL
MAR	BDL	1.900	.	.200 <T	.	.	BDL	.100 <T	BDL	1.100
APR	BDL	2.600	.	1.600	.	1.500	BDL	.150 <T	BDL	1.500
MAY	BDL	2.200	.	.650	.	1.600	BDL	.100 <T	BDL	.200 <T
JUN	BDL	2.300	.	2.050	.	2.050	BDL	2.350	.	BDL
JUL	BDL	2.700	.	2.100	.	.	BDL	2.000	BDL	BDL
AUG	BDL	3.500	.	3.150	.	2.700	BDL	.100 <T	BDL	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
SEP	BDL	3.200	.	2.750	.	2.350	.100 <T	.900	BDL	BDL
OCT	.100 <T	3.650	.	4.250	.	2.400	BDL	BDL	BDL	BDL
NOV	BDL	2.900	.	2.200	.	2.300	.100 <T	.150 <T	BDL	BDL
DEC	BDL	2.650	.	1.650	.	1.500	BDL	.150 <T	BDL	BDL
CHLORODIBROMOMETHANE (UG/L)			DET'N LIMIT = .100		GUIDELINE = 350 (A1+)					
JAN	BDL	.300 <T	.	.300 <T	.	.300 <T	BDL	BDL	BDL	BDL
MAR	BDL	.300 <T	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	.500 <T	.	.400 <T	.	.300 <T	BDL	.100 <T	BDL	.400 <T
MAY	BDL	.400 <T	.	.100 <T	.	.400 <T	BDL	BDL	BDL	.100 <T
JUN	BDL	.300 <T	.	.300 <T	.	.300 <T	BDL	3.000	.	BDL
JUL	BDL	.500 <T	.	.400 <T	.	.	BDL	2.200	BDL	BDL
AUG	BDL	.600 <T	.	.600 <T	.	.500 <T	BDL	BDL	BDL	BDL
SEP	BDL	.700 <T	.	.600 <T	.	.500 <T	BDL	.300 <T	BDL	BDL
OCT	BDL	.800 <T	.	.900 <T	.	.400 <T	BDL	BDL	BDL	BDL
NOV	BDL	.400 <T	.	.400 <T	.	.400 <T	BDL	BDL	BDL	BDL
DEC	BDL	.500 <T	.	.300 <T	.	.300 <T	BDL	.100 <T	BDL	BDL
T-CHLOROETHYLENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 10.0 (C2)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	.100 <T	.	BDL	BDL	.100 <T	BDL	BDL
MAY	BDL	BDL	.	.100 <T	.	BDL	.150 <T	.100 <T	BDL	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE TYPE	RAW	TREATED	SITE 1 STANDING	SITE 1 FREE FLOW	SITE 2 STANDING	SITE 2 FREE FLOW	RAW	TREATED	RAW	TREATED
JUN	BDL	BDL	.	BDL	.	.100 <T	BDL	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	.050 <T	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	.100 <T	.	BDL	.	BDL	.100 <T	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	.050 <T	.100 <T	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	.100 <T	BDL	BDL
BROMOFORM (UG/L)			DET'N LIMIT = .200		GUIDELINE = 350 (A1+)					
JAN	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAR	BDL	BDL	.	BDL	.	.	BDL	BDL	BDL	BDL
APR	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
MAY	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
JUN	BDL	BDL	.	BDL	.	BDL	BDL	.600 <T	.	BDL
JUL	BDL	BDL	.	BDL	.	.	BDL	.400 <T	BDL	BDL
AUG	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
SEP	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
OCT	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL
ETHLYENE DIBROMIDE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 50.0 (G)					
DEC	BDL	BDL	.	BDL	.	BDL	BDL	BDL	BDL	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM SAULT STE MARIE WTP AND WELL SUPPLY 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM				STEELTON WELL		LORNA WELL	
SITE			SITE 1		SITE 2					
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	RAW	TREATED	RAW	TREATED
TOTL TRIHALOMETHANES (UG/L)			DET'N LIMIT = .500		GUIDELINE = 350 (A1)					
JAN	BDL	14.900	.	6.500	.	7.900	BDL	BDL	BDL	BDL
MAR	BDL	9.100	.	.900 <T	.	.	BDL	.200	BDL	4.300 <T
APR	BDL	12.300	.	7.300	.	6.700	BDL	BDL	BDL	6.000
MAY	BDL	13.700	.	3.650 <T	.	9.900	BDL	.300 <T	.200 <T	.800 <T
JUN	BDL	13.500	.	11.650	.	12.550	BDL	7.150	.	BDL
JUL	BDL	14.900	.	10.500	.	.	BDL	5.800	BDL	BDL
AUG	BDL	18.000	.	17.850	.	13.800	BDL	BDL	BDL	BDL
SEP	BDL	17.000	.	14.550	.	11.650	BDL	4.700	BDL	BDL
OCT	BDL	19.450	.	23.750	.	12.500	BDL	BDL	BDL	BDL
NOV	BDL	14.900	.	11.400	.	11.900	BDL	BDL	BDL	BDL
DEC	BDL	15.350	.	9.750	.	8.700	BDL	BDL	BDL	BDL

Table VI

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
BACTERIOLOGICAL			
STANDARD PLATE COUNT MEMBRANE FILTRATION	CT/ML	0	500/ML(A1)
P/A BOTTLE		0	0 (A1*)
TOTAL COLIFORM MEMBRANE FILTRATION	CT/100ML	0	5/100mL(A1)
TOTAL COLIFORM BACKGROUND MF	CT/100ML	0	N/A
CHLOROAROMATICS			
HEXACHLOROBUTADIENE	NG/L	1.000	450. (D4)
1,2,3-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,3,4-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,3,5-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,4-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,4,5-TETRACHLOROBENZENE	NG/L	1.000	38000 (D4)
1,3,5-TRICHLOROBENZENE	NG/L	5.000	10000 (D4)
HEXACHLOROBENZENE	NG/L	1.0	10. (C1)
HEXACHLOROETHANE	NG/L	1.000	1900. (D4)
OCTACHLOROSTYRENE	NG/L	1.000	N/A
PENTACHLOROBENZENE	NG/L	1.000	74000 (D4)
2,3,6-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,4,5-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,6,A-TRICHLOROTOLUENE	NG/L	5.000	N/A
CHLOROPHENOLS			
2,3,4-TRICHLOROPHENOL	NG/L	50.	N/A
2,3,4,5-TETRACHLOROPHENOL	NG/L	50.	N/A
2,3,5,6-TETRACHLOROPHENOL	NG/L	50.	N/A
2,4,5-TRICHLOROPHENOL	NG/L	50.	2600000 (D4)
2,4,6-TRICHLOROPHENOL	NG/L	50.	5000. (B1)
PENTACHLOROPHENOL	NG/L	50.	60000. (B1)
CHEMISTRY (FLD)			
FIELD COMBINED CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD FREE CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD TOTAL CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD PH	DMSNLESS	N/A	6.5-8.5(A4)
FIELD TEMPERATURE	°C	N/A	<15 °C(A1)
FIELD TURBIDITY	FTU	N/A	1.0 (A1)
CHEMISTRY (LAB)			
ALKALINITY	MG/L	.200	30-500(A4)
CALCIUM	MG/L	.100	100. (F2)
CYANIDE	MG/L	.001	.20(A1)
CHLORIDE	MG/L	.200	250. (A3)
COLOUR	TCU	.5	5.0 (A3)
CONDUCTIVITY	UMHO/CM	1.	400. (F2)
FLUORIDE	MG/L	.01	2.4 (A1)
HARDNESS	MG/L	.50	80-100(A4)
MAGNESIUM	MG/L	.05	30. (F2)
SODIUM	MG/L	.20	200. (C3)
AMMONIUM TOTAL	MG/L	.002	.05(F2)
NITRITE	MG/L	.001	1.0 (A1)
TOTAL NITRATES	MG/L	.02	10. (A1)
NITROGEN TOTAL KJELDAHL	MG/L	.02	N/A
PH	DMSNLESS	N/A	6.5-8.5(A4)
PHOSPHORUS FIL REACT	MG/L	.0005	N/A
PHOSPHORUS TOTAL	MG/L	.002	.40(F2)
TOTAL SOLIDS	MG/L	1.	500. (A3)
TURBIDITY	FTU	.02	1.0 (A1)
METALS			

BORON	UG/L	.200	5000.	(A1)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE	
BERYLLIUM	UG/L	.010	0.20	(H)
CADMIUM	UG/L	.050	5.0	(A1)
COBALT	UG/L	.020	1000.	(H)
CHROMIUM	UG/L	.100	50.	(A1)
COPPER	UG/L	.100	1000.	(A3)
IRON	UG/L	4.0	300.	(A3)
MERCURY	UG/L	.01	1.0	(A1)
MANGANESE	UG/L	.050	50.	(A3)
MOLYBDENUM	UG/L	.020	500.	(H)
NICKEL	UG/L	.100	50.	(F3)
LEAD	UG/L	.050	50.	(A1)
SELENIUM	UG/L	.200	10.	(A1)
SILVER	UG/L	.020	50.	(A1)
STRONTIUM	UG/L	.050	2000.	(H)
THALLIUM	UG/L	.010	13.	(D4)
TITANIUM	UG/L	.050	N/A	
URANIUM	UG/L	.020	20.	(A2)
VANADIUM	UG/L	.050	100.	(H)
ZINC	UG/L	.020	500.	(A3)
PHENOLICS				
PHENOLICS (UNFILTERED REACTIVE)	UG/L	.2	2.0	(A3)
PESTICIDES & PCB				
ALDRIN	NG/L	1.0	700.	(A1)
AMETRINE	NG/L	50.	300000.	(D3)
ATRAZINE	NG/L	50.	60000.	(B3)
ALPHA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	700.	(G)
BETA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	300.	(G)
GAMMA HEXACHLOROCYCLOHEXANE(LINDANE)	NG/L	1.0	4000.	(A1)
ALPHA CHLORDANE	NG/L	2.0	7000.	(A1)
GAMMA CHLORDANE	NG/L	2.0	7000.	(A1)
BLADEX	NG/L	100.	10000.	(B3)
DIELDRIN	NG/L	2.0	700.	(A1)
METHOXYCHLOR	NG/L	5.0	100000.	(A1)
ENDOSULFAN 1 (THIODAN I)	NG/L	2.0	74000.	(D4)
ENDOSULFAN 2 (THIODAN II)	NG/L	4.0	74000.	(D4)
ENDRIN	NG/L	4.0	200.	(A1)
ENDOSULFAN SULPHATE(THIODAN SULPHATE)	NG/L	4.0	N/A	
HEPTACHLOR EPOXIDE	NG/L	1.0	3000.	(A1)
HEPTACHLOR	NG/L	1.0	3000.	(A1)
METOLACHLOR	NG/L	500.	50000.	(B3)
MIREX	NG/L	5.0	N/A	
OXYCHLORDANE	NG/L	2.0	N/A	
O,P-DDT	NG/L	5.0	30000.	(A1)
PCB	NG/L	20.0	3000.	(A2)
O,P-DDD	NG/L	5.0	N/A	
PPDDE	NG/L	1.0	30000.	(A1)
PPDDT	NG/L	5.0	30000.	(A1)
ATRATONE	NG/L	50.	N/A	
ALACHLOR	NG/L	500.	35000.	(D2)
PROMETONE	NG/L	50.	52500.	(D3)
PROPAZINE	NG/L	50.	16000.	(D2)
PROMETRYNE	NG/L	50.	1000.	(B3)
SENCOR (METRIBUZIN)	NG/L	100.	80000.	(B2)
SIMAZINE	NG/L	50.	10000.	(B3)
POLYAROMATIC HYDROCARBONS				
PHENANTHRENE	NG/L	10.0	N/A	
ANTHRACENE	NG/L	1.0	N/A	
FLUORANTHENE	NG/L	20.0	42000.	(D4)
PYRENE	NG/L	20.0	N/A	
BENZO(A)ANTHRACENE	NG/L	20.0	N/A	
CHRYSENE	NG/L	50.0	N/A	
DIMETHYL BENZO(A)ANTHRACENE	NG/L	5.0	N/A	
BENZO(E)PYRENE	NG/L	50.0	N/A	
BENZO(B)FLUORANTHENE	NG/L	10.0	N/A	
PERYLENE	NG/L	10.0	N/A	
BENZO(K)FLUORANTHENE	NG/L	1.0	N/A	
BENZO(A)PYRENE	NG/L	5.0	10.	(B1)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE	
BENZO(G,H,I)PERYLENE	NG/L	20.0	N/A	
DIBENZO(A,H)ANTHRACENE	NG/L	10.0	N/A	
INDENO(1,2,3-C,D)PYRENE	NG/L	20.0	N/A	
BENZO(B)CHRYSENE	NG/L	2.0	N/A	
CORONENE	NG/L	10.0	N/A	
SPECIFIC PESTICIDES				
TOXAPHENE	NG/L	N/A	5000.	(A1)
2,4,5-TRICHLOROBUTYRIC ACID (2,4,5-T)	NG/L	50.	280000.	(B1)
2,4-DICHLOROBUTYRIC ACID (2,4-D)	NG/L	100.	100000.	(A1)
2,4-DICHLORORPHENOXYBUTYRIC ACID	NG/L	200.	18000.	(B3)
2,4-D PROPIONIC ACID	NG/L	100.	N/A	
DICAMBA	NG/L	100.	87000.	(B3)
PICHLORAM	NG/L	100.	2450000.	(D3)
SILVEX (2,4,5-TP)	NG/L	50.	10000.	(A1)
DIAZINON	NG/L	20.	14000.	(A1)
DICHLOROVOS	NG/L	20.	N/A	
DURSBAN	NG/L	20.	N/A	
ETHION	NG/L	20.	35000.	(G)
GUTHION	NG/L	N/A	N/A	
MALATHION	NG/L	20.	160000.	(G)
MEVINPHOS	NG/L	20.	N/A	
METHYL PARATHION	NG/L	50.	7000.	(B3)
METHYLTRITHION	NG/L	20.	N/A	
PARATHION	NG/L	20.	35000.	(B1)
PHORATE (THIMET)	NG/L	20.	35.	(D2)
RELDAN	NG/L	20.	N/A	
RONNEL	NG/L	20.	N/A	
AMINOCARB	NG/L	N/A	N/A	
BENOMYL	NG/L	N/A	N/A	
BUX (METALKAMATE)	NG/L	2000.	N/A	
CARBOFURAN	NG/L	2000.	18000.	(D3)
CICP (CHLORPROPHAM)	NG/L	2000.	350000.	(G)
DIALLATE	NG/L	2000.	30000.	(H)
EPTAM	NG/L	2000.	N/A	
IPC	NG/L	2000.	N/A	
PROPOXUR (BAYGON)	NG/L	2000.	90000.	(G)
SEVIN (CARBARYL)	NG/L	200.	70000.	(A1)
SUTAN (BUTYLATE)	NG/L	2000.	245000.	(D3)
VOLATILES				
BENZENE	UG/L	.050	5.0	(B1)
TOLUENE	UG/L	.050	24.0	(B4)
ETHYLBENZENE	UG/L	.050	2.4	(B4)
PARA-XYLENE	UG/L	.100	300.	(B4)
META-XYLENE	UG/L	.100	300.	(B4)
ORTHO-XYLENE	UG/L	.050	300.	(B4)
1,1-DICHLOROETHYLENE	UG/L	.100	7.0	(D1)
ETHLYENE DIBROMIDE	UG/L	.05	50.	(G)
METHYLENE CHLORIDE	UG/L	.500	1750.	(D3)
TRANS-1,2-DICHLOROETHYLENE	UG/L	.100	350.	(D3)
1,1-DICHLOROETHANE	UG/L	.100	N/A	
CHLOROFORM	UG/L	.100	350.	(A1+)
1,1,1-TRICHLOROETHANE	UG/L	.020	200.	(D1)
1,2-DICHLOROETHANE	UG/L	.050	5.0	(D1)
CARBON TETRACHLORIDE	UG/L	.200	5.0	(D1)
1,2-DICHLOROPROPANE	UG/L	.050	10.0	(G)
TRICHLOROETHYLENE	UG/L	.100	5.0	(D1)
DICHLOROBROMOMETHANE	UG/L	.050	350.	(A1+)
1,1,2-TRICHLOROETHANE	UG/L	.050	.60	(D4)
CHLORODIBROMOMETHANE	UG/L	.100	350.	(A1+)
TETRACHLOROETHYLENE	UG/L	.050	10.0	(C2)
BROMOFORM	UG/L	.200	350.	(A1+)
1,1,2,2-TETRACHLOROETHANE	UG/L	.050	0.17	(D4)
CHLOROBENZENE	UG/L	.100	1510.	(D3)
1,4-DICHLOROBENZENE	UG/L	.100	5.0	(B1)
1,3-DICHLOROBENZENE	UG/L	.100	130.	(G)
1,2-DICHLOROBENZENE	UG/L	.050	200.	(B1)
TRIFLUOROCHLOROTOLUENE	UG/L	.100	N/A	
TOTAL TRIHALOMETHANES	UG/L	.500	350.	(A1)
STYRENE	UG/L	.05	46.5	(D2)

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